

# Title: **Transportation in IIT**

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Visual Communication

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IDC, IIT Bombay

# PROJECT

**Redesigning the user interface of the existing transportation service website of the campus.**



## Within the IIT Bombay Campus





# WITHIN THE IIT BOMBAY CAMPUS

## Scenario

**Area of the campus: 2.2257 km<sup>2</sup>**

Mode of travel to commute is as follows:

Walking

Cycles

Bus services provided by the institute

Auto Rickshaws

Bus services provided by the institute

Private Vehicles - Bikes

Cars

Public transport vehicles from outside the campus



# WITHIN THE IIT BOMBAY CAMPUS

## Problem

**Lack of organised and analysed dissemination of information regarding**

Precise timings of bus services.

Accurate directions of quickest routes to various destinations.

Clear instructions to various destinations.

Local news.

# **WITHIN THE IIT BOMBAY CAMPUS**

## **Solution**

**A digitised platform that can be accessed by the target audience which provides**

Precise timings of bus services.

Accurate directions of quickest routes to various destinations.

Clear instructions to various destinations.

Dedicated social networking platform which provides immediate updates.

Local weather information.



# **WITHIN THE IIT BOMBAY CAMPUS**

## **Process followed**

**Analysis of data that gives simplified information to the user**

### **Calculations**

Buses - Average speed, number of buses, bus routes, locating bus stops.

Cars - Average speed.

Walking - Average speed, tracing pedestrian paths.

Locations - Calculating fixed points on the map.

Routes - Calculating accurate junctions and routes of the campus.



# Outside the IIT Bombay Campus





# **OUTSIDE THE IIT BOMBAY CAMPUS**

## **Implementation of the project on a wider scale**

### **Analysis of data that gives simplified information to the user**

India is a developing economy witnessing rapidly growing cities. Public transit systems are playing a major role in commute. Eg. Monorail, Metrorail, Railways, Buses, Share Autos, Prepaid taxis, etc.

Many locations are not traced accurately in current map solutions.

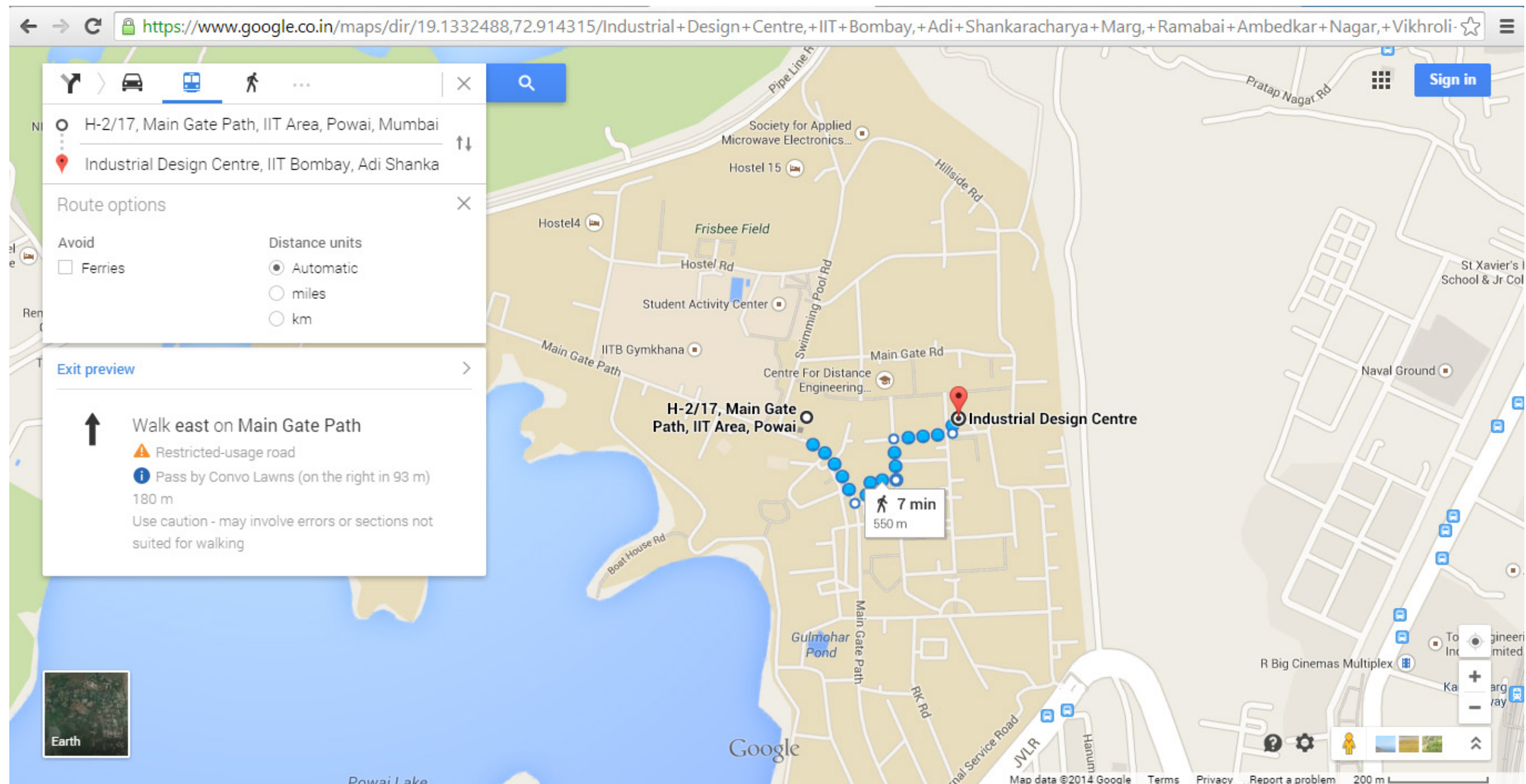
Hence, the network of urban transportation systems is complex where collected data can be analysed to give accessible information to the commuters.

## **CASE STUDIES**

- 1) Google
- 2) Transportation for London
- 3) Union

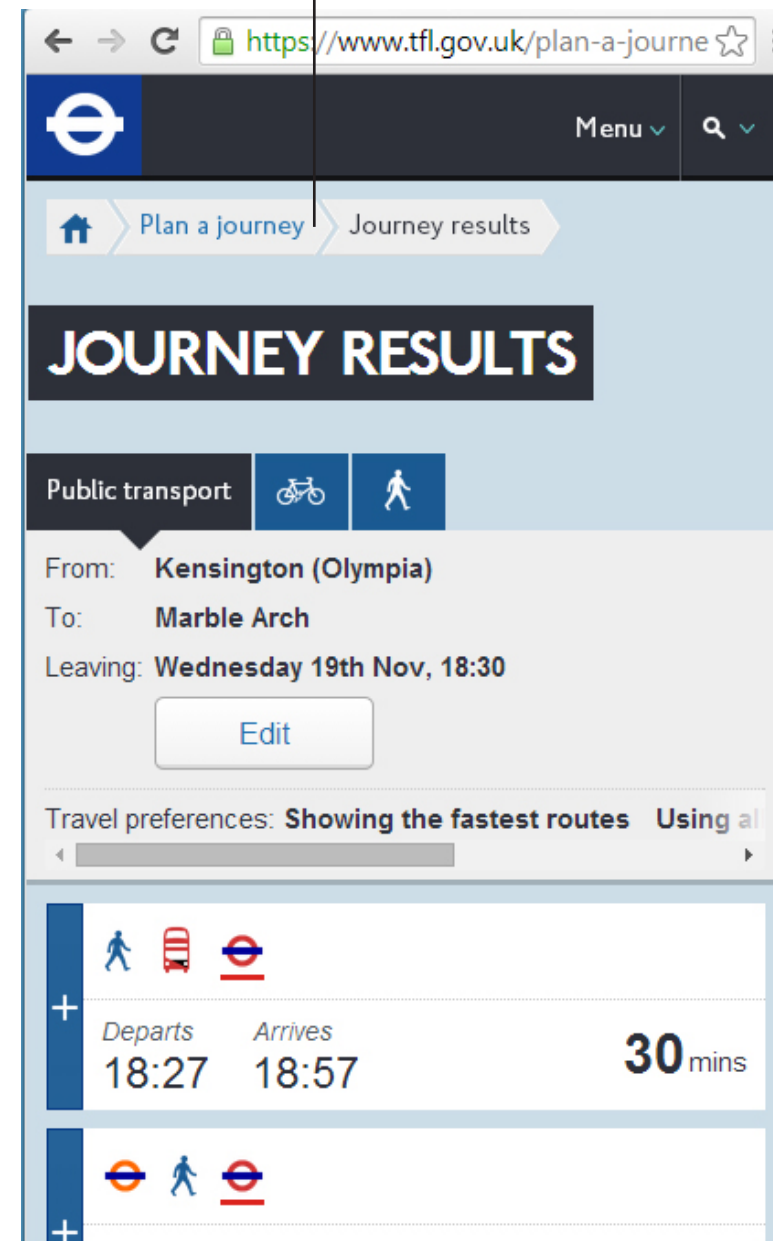
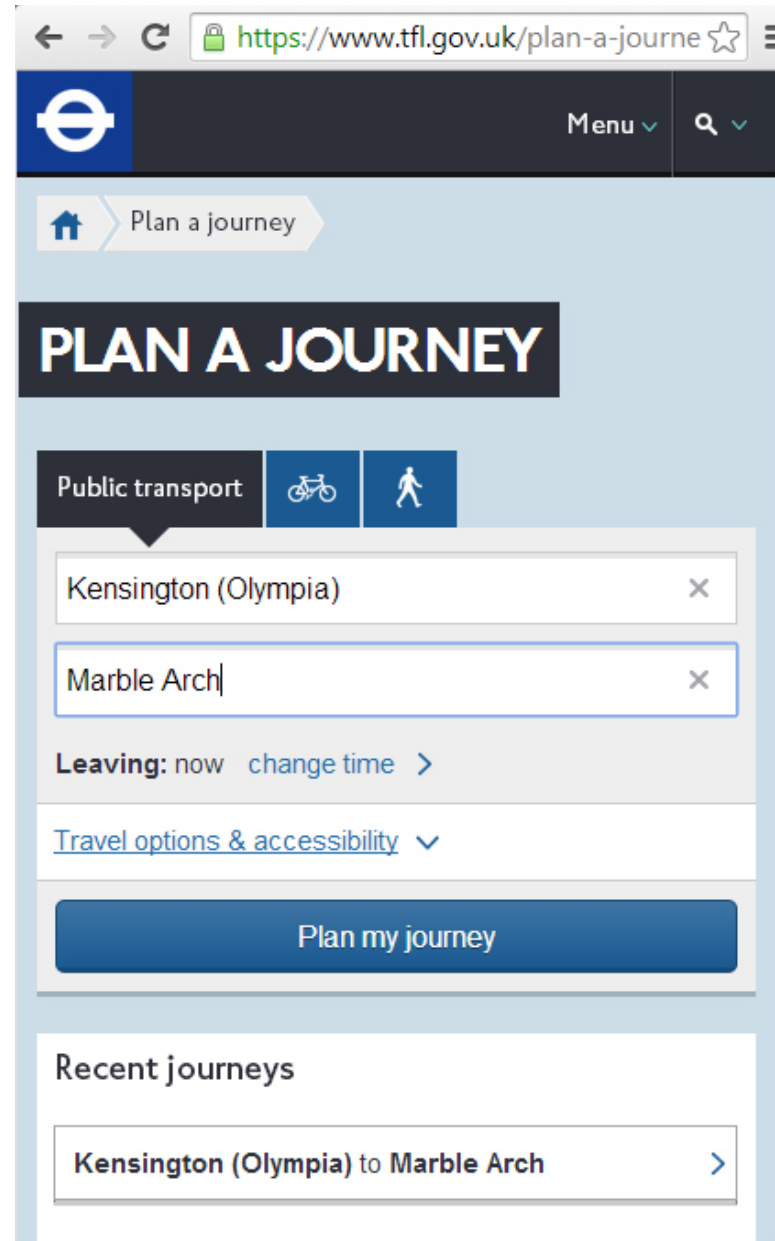


# Google Google maps



# Transport for London <https://www.tfl.gov.uk>

Breadcrumbs navigation



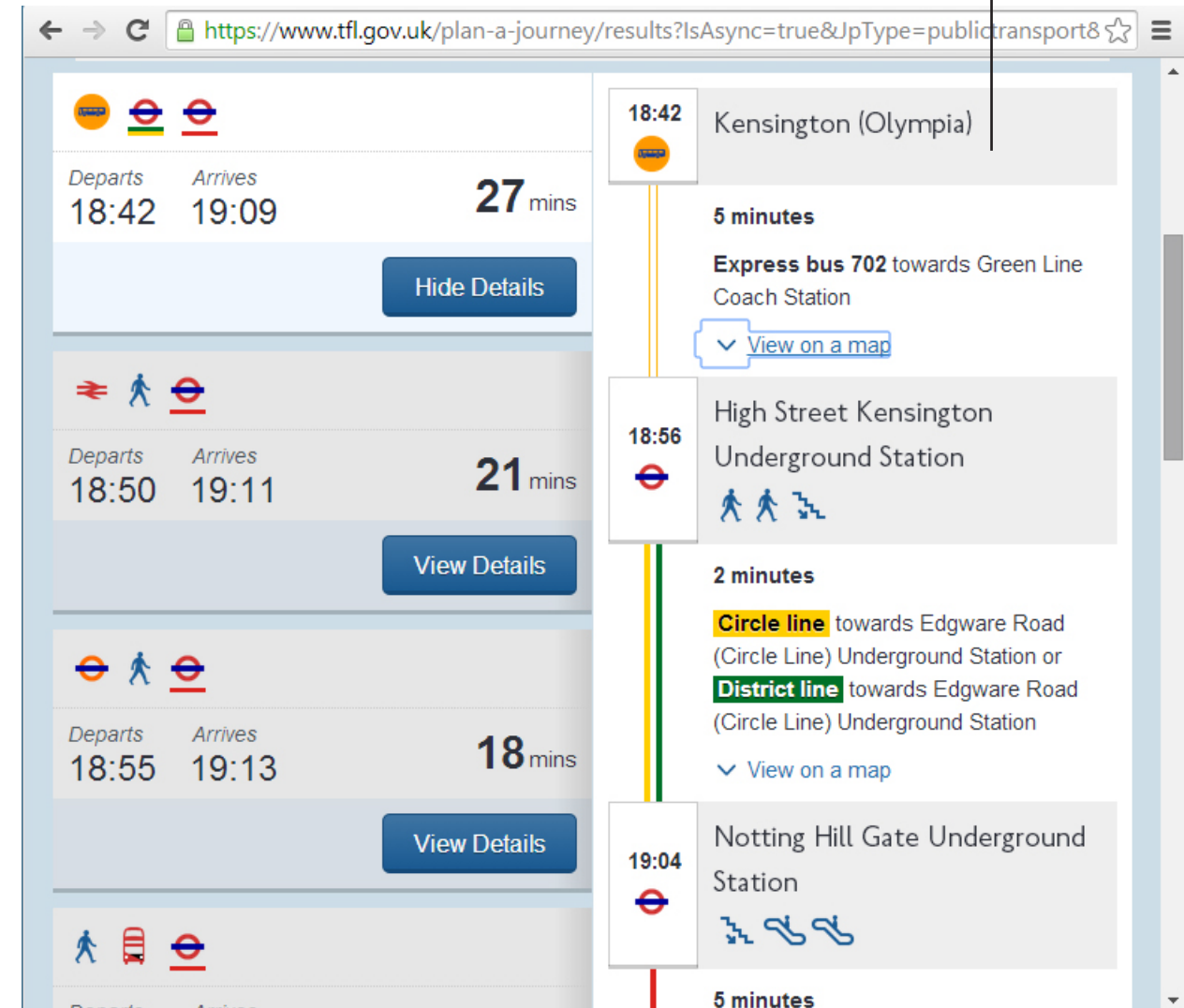
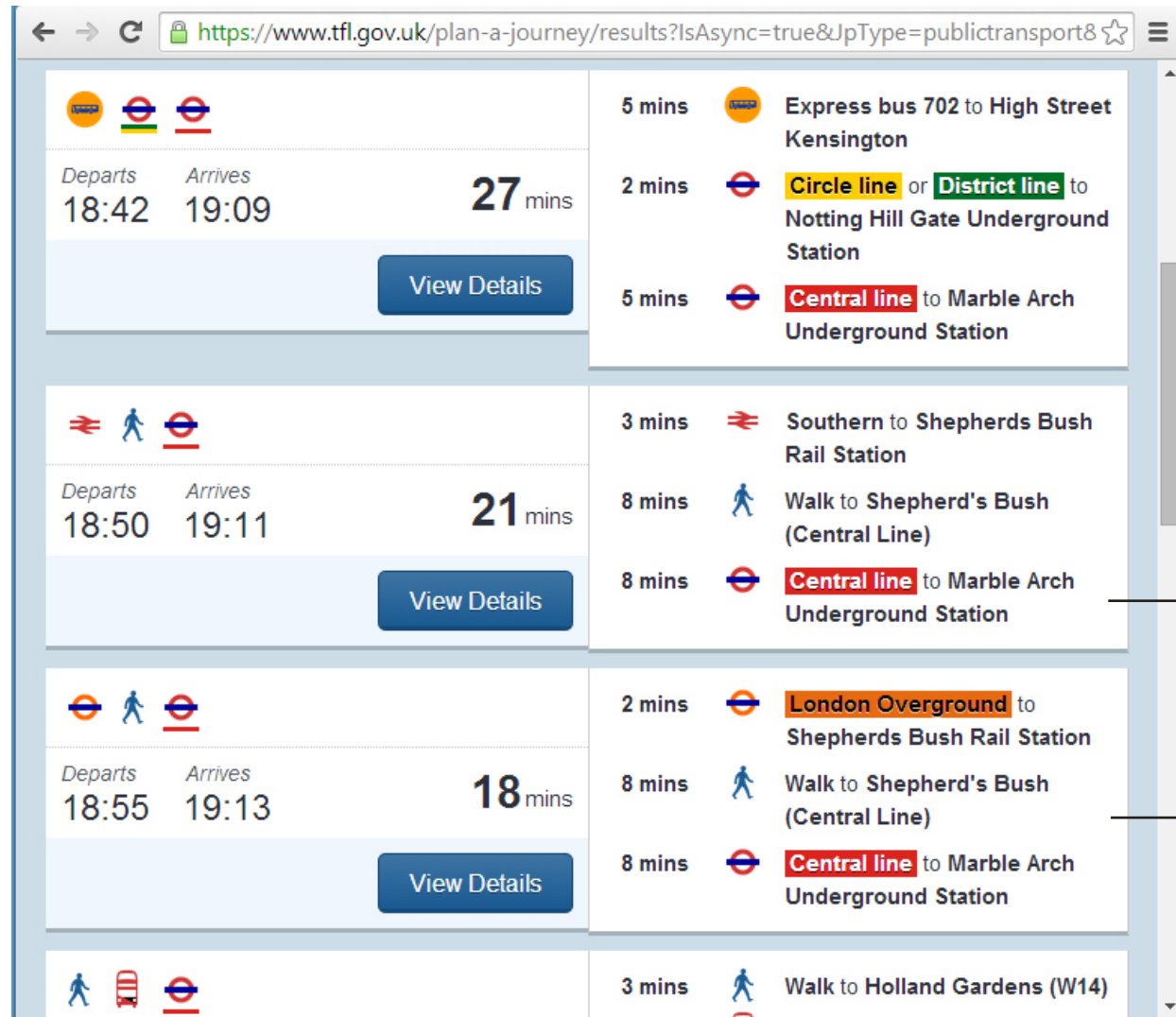
## Highlights of the website:

- Responsive web design principles
- Responsive type
- Fluid inline images
- Responsive layouts
- Responsive navigation
- Responsive menu bars
- Hamburger menu style
- Modern user interface
- Breadcrumbs navigation



<https://www.tfl.gov.uk>


## Flyout menu




## Responsive layouts

# Transport for London <https://www.tfl.gov.uk>

MAYOR OF LONDON

 TRANSPORT FOR LONDON


[Plan a journey](#) [Status updates](#) [Maps](#) [Fares & payments](#) [More...](#)


Search 

[Home](#) [Plan a journey](#) [Journey results](#)

# JOURNEY RESULTS

Public transport




 Cycle in 18mins

 Walk this in 57mins

From: **Kensington (Olympia)** Leaving: **Wednesday 19th Nov, 18:00** [Edit](#)

To: **Marble Arch**

Travel preferences: **Showing the fastest routes** [Using all transport modes](#) [Max walk time 40 mins](#)


Departs


Arrives


**17:58** **18:28**


**30 mins**




[View Details](#)

13 mins  **9 bus or 28 bus or 27 bus or 10 bus to High Street Kensington Station**

 [Status alert for route 27, 28, 9](#)

1 min  **Circle line** to Notting Hill Gate Underground Station

5 mins  **Central line** to Marble Arch Underground Station


Departs


Arrives


**18:10** **18:30**

**20 mins**




[View Details](#)

2 mins  **London Overground** to Shepherds Bush Rail Station

8 mins  Walk to Shepherd's Bush (Central Line)

9 mins  **Central line** to Marble Arch Underground Station

# Transport for London <https://www.tfl.gov.uk>



Departs




Arrives

17:58

18:28

30 mins

Hide Details



Departs




Arrives

18:10

18:30

20 mins

View Details



Departs




Arrives

18:11

18:42

31 mins

View Details



Departs

Arrives


18:25

18:44

19 mins

View Details

17:58



Kensington (Olympia) - Stop K

13 minutes

9 bus

 towards Aldwych or

28 bus

 towards Kensal Rise or

27 bus

 towards Chalk Farm or

10 bus

 towards King's Cross


⚠

 Status alert for route 27, 28, 9




View all stops

View on a map

18:16



High Street Kensington Underground Station




1 minute

Circle line




 towards Edgware Road (Circle Line) Underground Station

View on a map

18:23



Notting Hill Gate Underground Station



5 minutes

Central line

 towards Hainault Underground Station, Debden Underground Station, Epping Underground Station or Loughton Underground Station




View all stops

View on a map



# Transport for London <https://www.tfl.gov.uk>

Accordian menu



Departs




17:58

Arrives

18:28

30 mins

Hide Details



Departs




18:10

Arrives

18:30

20 mins

View Details



Departs




18:11

Arrives

18:42

31 mins

View Details



Departs

18:25


Arrives

18:44

19 mins

View Details


17:58



Kensington (Olympia) - Stop K

13 minutes

9 bus towards Aldwych or  
28 bus towards Kensal Rise or  
27 bus towards Chalk Farm or  
10 bus towards King's Cross

 Status alert for route 27, 28, 9

ROUTE 9: Buses start / terminate at Green Park from 1200 to 1600, Wednesday 19 November due to road closures for the Student March and Rally taking place from Russell Square to Old Palace Yard


GREAT WESTERN ROAD W11: Route 23 28 31 328 N28 N31 unable to serve Stop 'A' Westbourne Park Station (50245) from 0300 Monday 20 October until approximately March 2015 due to Crossrail sewer diversion works.

PROPOSED EXTENSION OF ROUTE 70 TO CHISWICK BUSINESS PARK AND ADDITIONAL STOPS FOR ROUTE 27: We are proposing to extend route 70 to Chiswick Business Park (CBP) via Acton Town Station. CBP consists of commercial businesses, a large multi-purpose events piazza, restaurants, and shops. The proposed route 70 extension would provide a service for customers wishing to travel to CBP from the north. CBP is currently served by routes 237, 267 and H91 at Gunnersbury Station and by route 27 which enters the park from the south, and it is proposed to add extra stops in CBP




View all stops

View on a map

18:16




High Street Kensington Underground Station



# Transport for London <https://www.tfl.gov.uk>

MAYOR OF LONDON

 TRANSPORT FOR LONDON


[Plan a journey](#)

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[More...](#)


 Maps


# MAPS





Go


 **Nearby**  
Near your current location


 **Tube and Rail**


 Tube

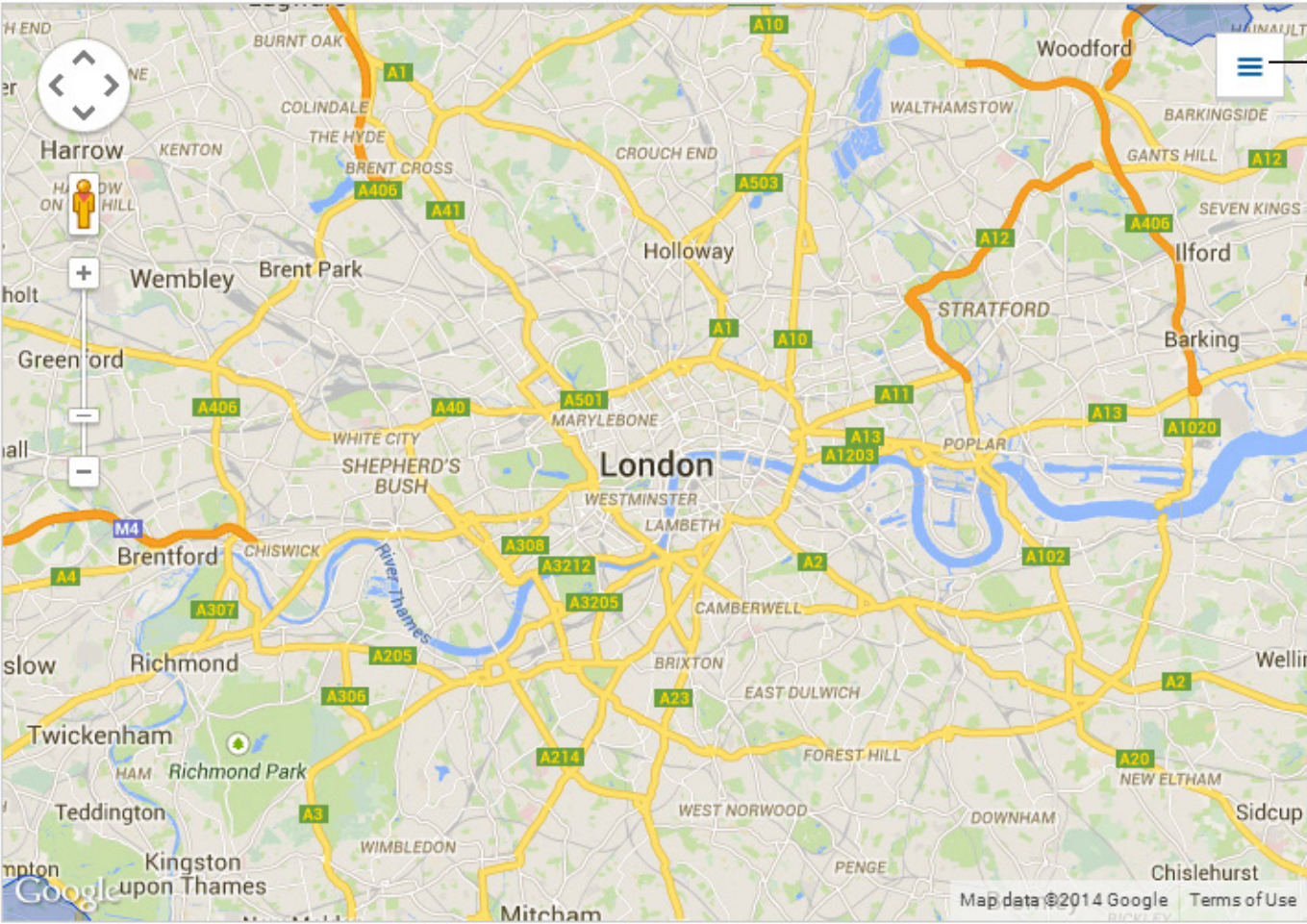
 DLR

 Overground


 National Rail

 Tram

 Bus






Map data ©2014 Google Terms of Use



Hamburger menu icon



# Transport for London <https://www.tfl.gov.uk>



Departs




18:42

Arrives

19:09

27 mins

Hide Details



Departs




18:50

Arrives

19:11

21 mins

View Details



Departs




18:55

Arrives

19:13

18 mins

View Details



Departs

18:56


Arrives

19:25

29 mins

View Details

18:42

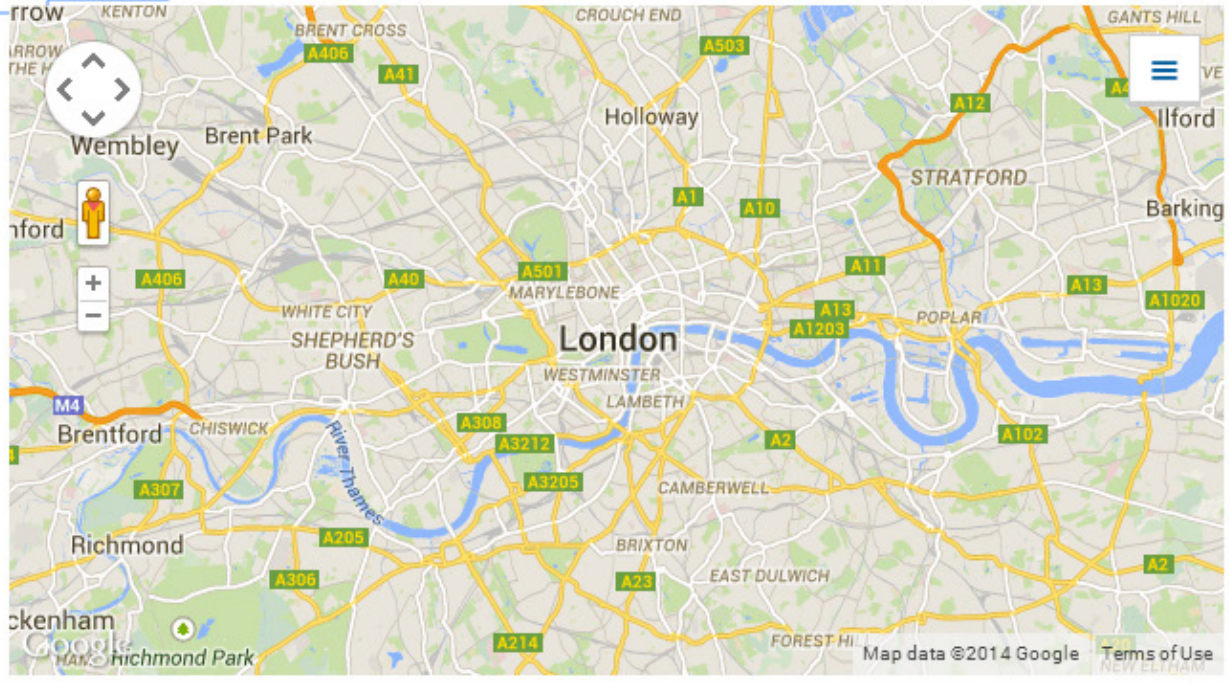


Kensington (Olympia)


5 minutes

Express bus 702 towards Green Line Coach Station




Hide map



18:56



High Street Kensington Underground Station



2 minutes

Circle line

 towards Edgware Road (Circle Line) Underground Station or

District line

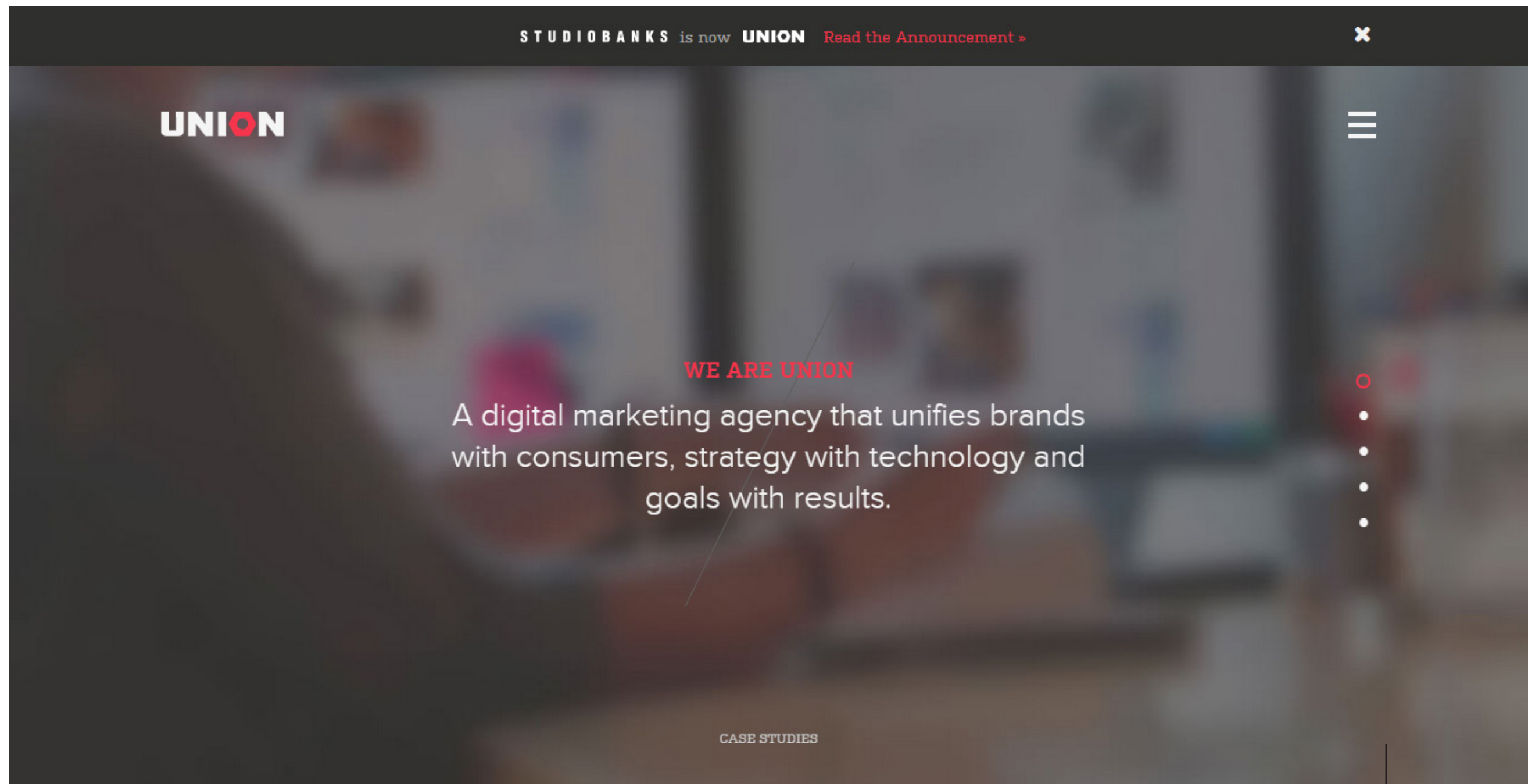
 towards Edgware Road (Circle Line) Underground Station

View on a map

19:04

Notting Hill Gate Underground Station

Union <http://union.co/work/duke-energy>

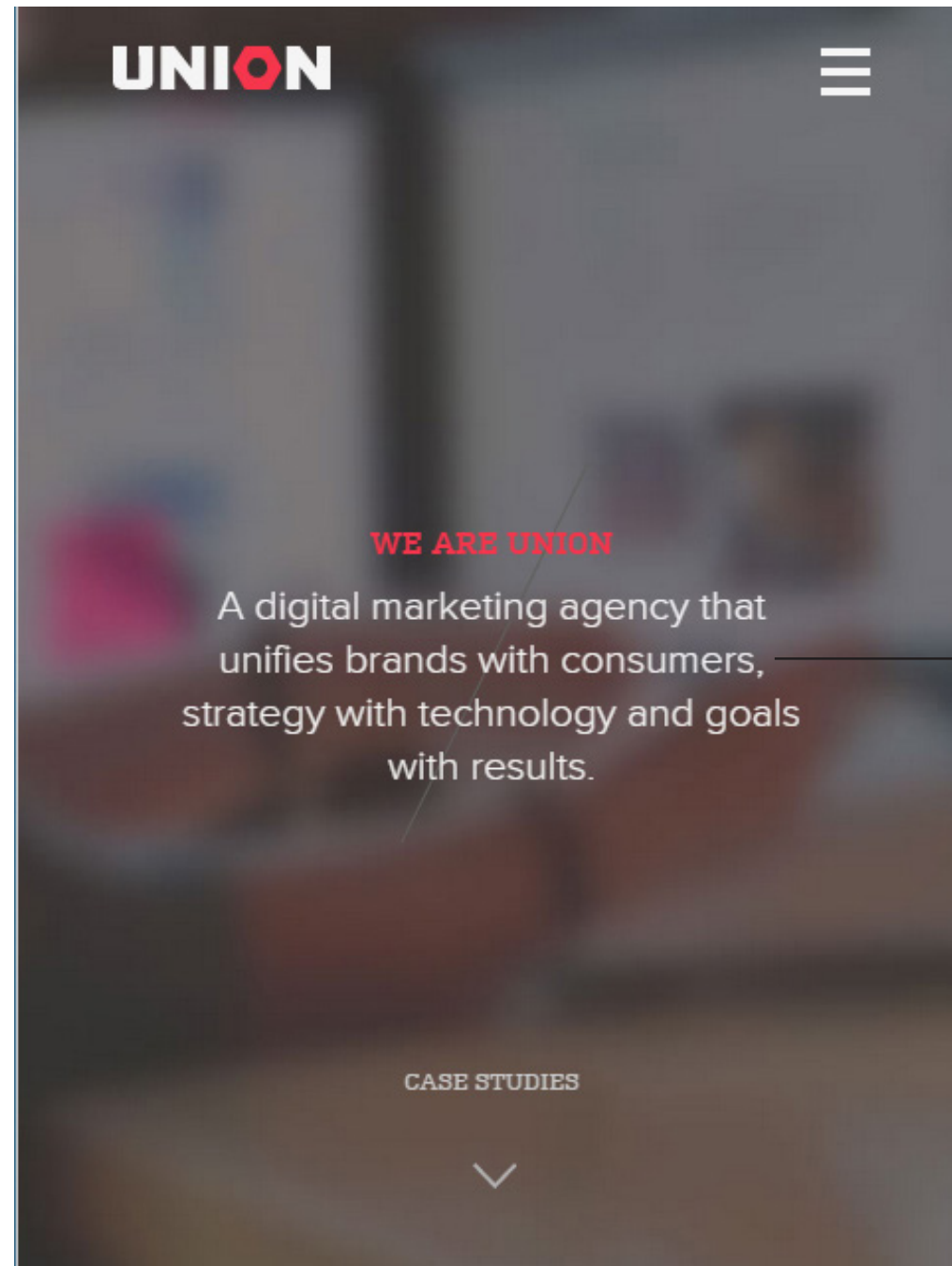


1366px x 738px

Blurred background image

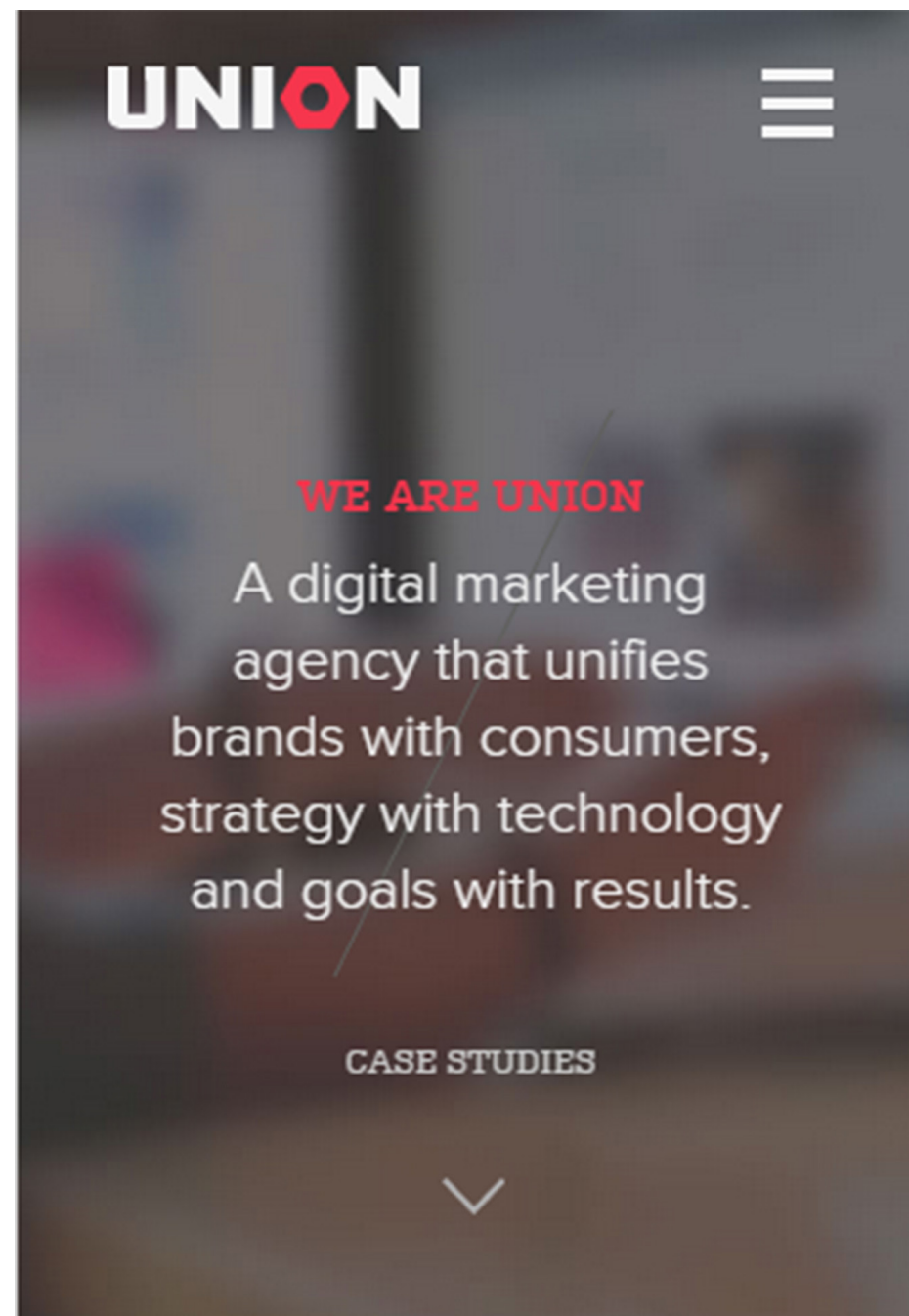


Union <http://union.co/work/duke-energy>



Responsive type

480px x 640px



320px x 480px

## Highlights of the websites

**Responsive web design principles:** enables a viewing experience to the user that is optimised across all devices such that the screen size and its contents is adapted proportionately to technical requirements of each.

**Responsive type:** The typography resizes and realigns to the variable screen sizes enabling easier reading.

**Fluid inline images:** The images embedded in the content, resize proportionately to the screen sizes according to set percentages.

**Responsive layouts:** The grids and columns of the screen realign according to the variable screen sizes.

**Responsive navigation:** The navigation adapts its to the various screen sizes such that it is easy for the user to sort the menu sequentially.

**Responsive menu bars:** The menu bars resize optimally such that user is able read the text on menu bars and navigate easily through minimum clicks.

**Blurred background image:** Blurred photographs reduces the overall size of the website while loading the image.

**Hamburger menu style:** It is symbolic icon to depict a classic menu when clicked.

**Modern User interface:** The characteristics of a modern user interface are minimal visual clutter, simple navigation with least number of clicks, high clarity photographs that are optimised to load in least amount of time, organised data and clear sequential flow of information.

# Technical Specifications - Responsive Design



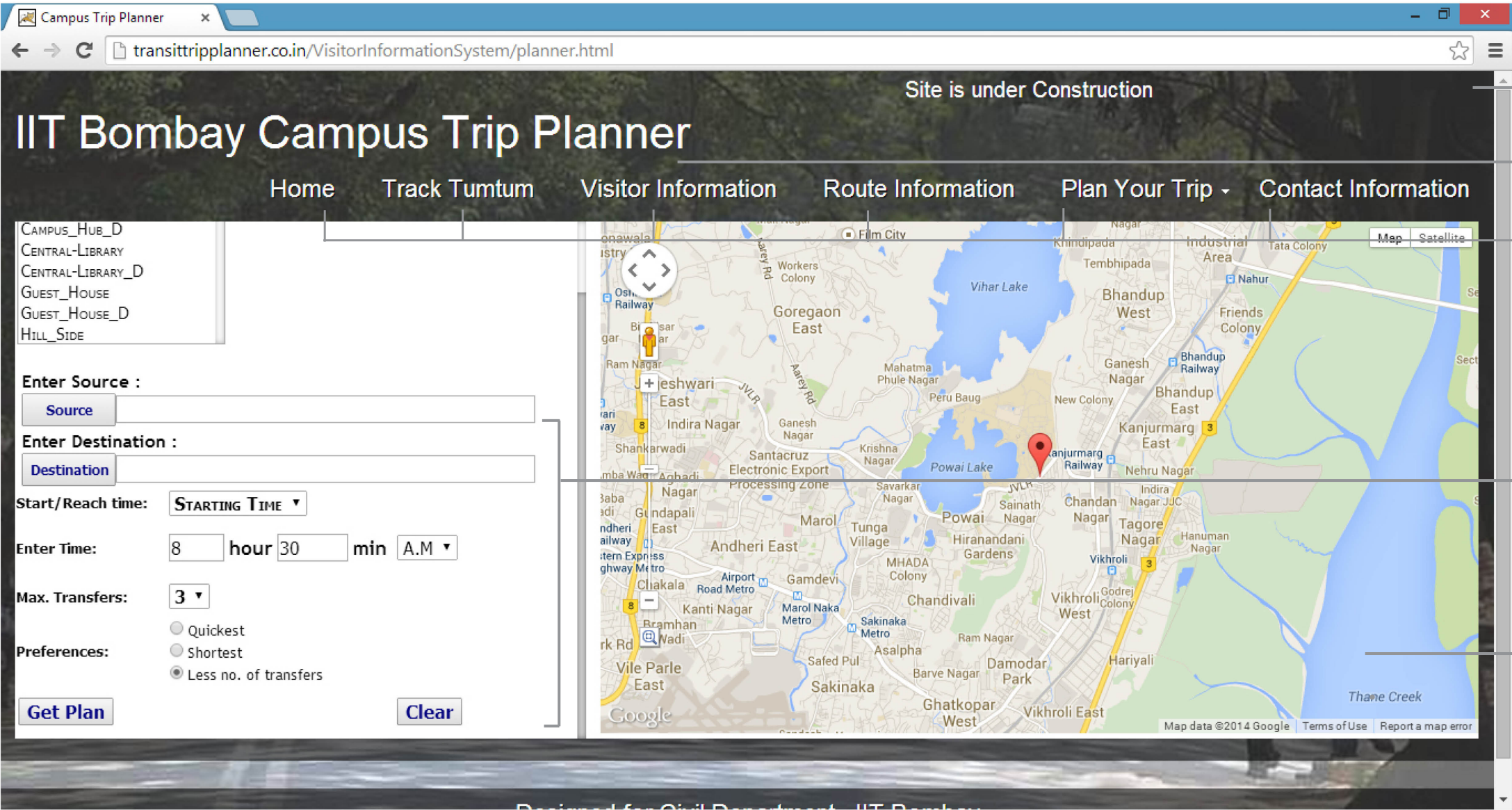
Courtesy: <http://www.mutedialogue.com/work/new-bbc-tv-channel-homepages/>

# **EXISTING INTERFACE**

designed by Department of Civil Engineering, IIT Bombay



# Earlier interface



## Observations

Lack of a clear photograph that is optimised to web viewing conditions

Lack of a visual identity to the website

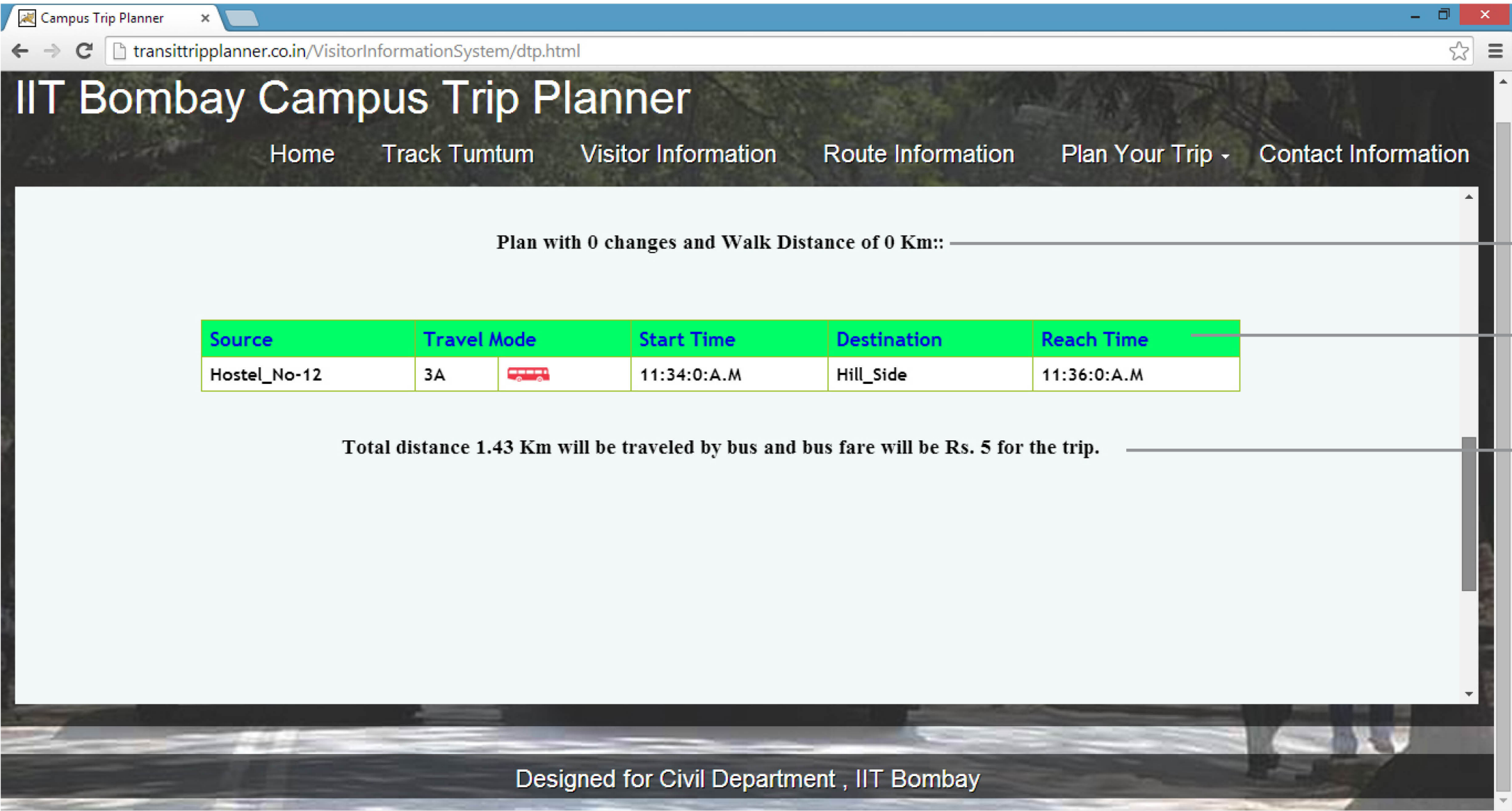
Cluttered menu bar  
Lack of an organised and systematic navigation model.

The system requires several inputs from user that can avoided by planning the structure of the website.  
Improper alignment of data. Lacks a margin from the edge of the screen.

The map provided is overextensive than required

Courtesy: <http://transittripplanner.co.in/VisitorInformationSystem/>

# Earlier interface



## Observations

Lack of a visual to display route on map

Unnecessary display of output. Out of context sentences can be eliminated

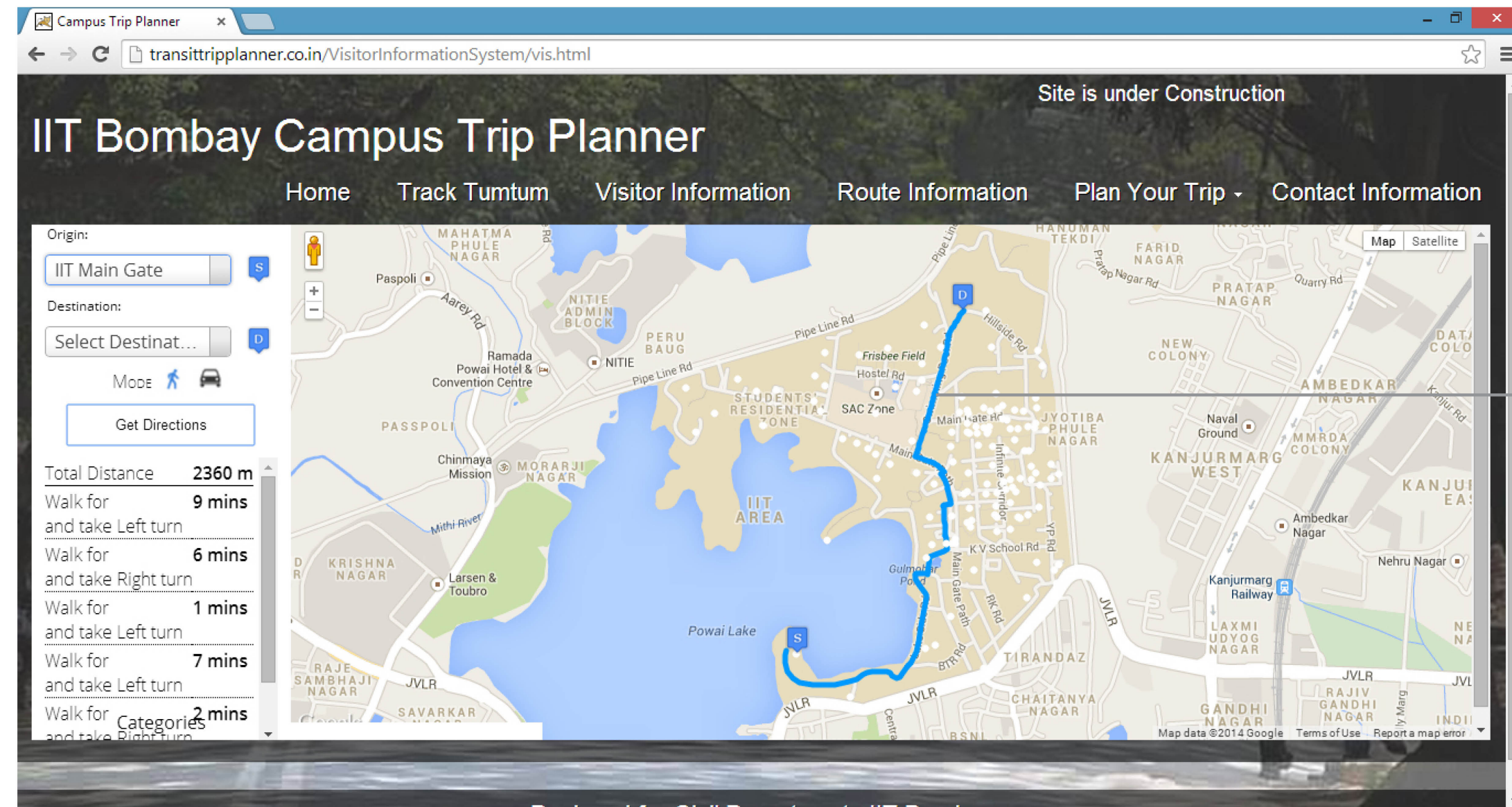
Improper visual design  
Unnecessary use of colour

Lack of visual hierarchy

Courtesy: <http://transittripplanner.co.in/VisitorInformationSystem/>



# Earlier interface

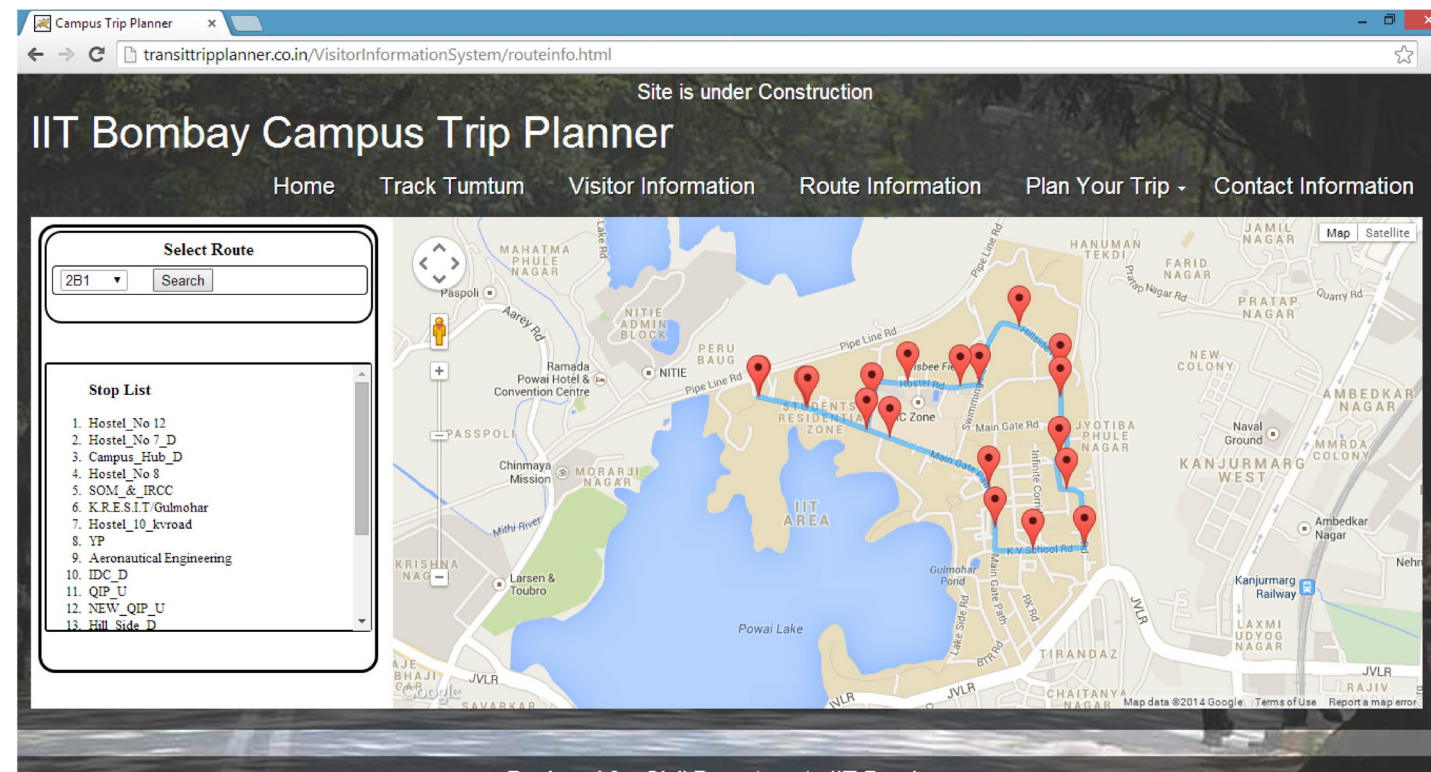


Absence of visual cue to show directions

Courtesy: <http://transittripplanner.co.in/VisitorInformationSystem/>

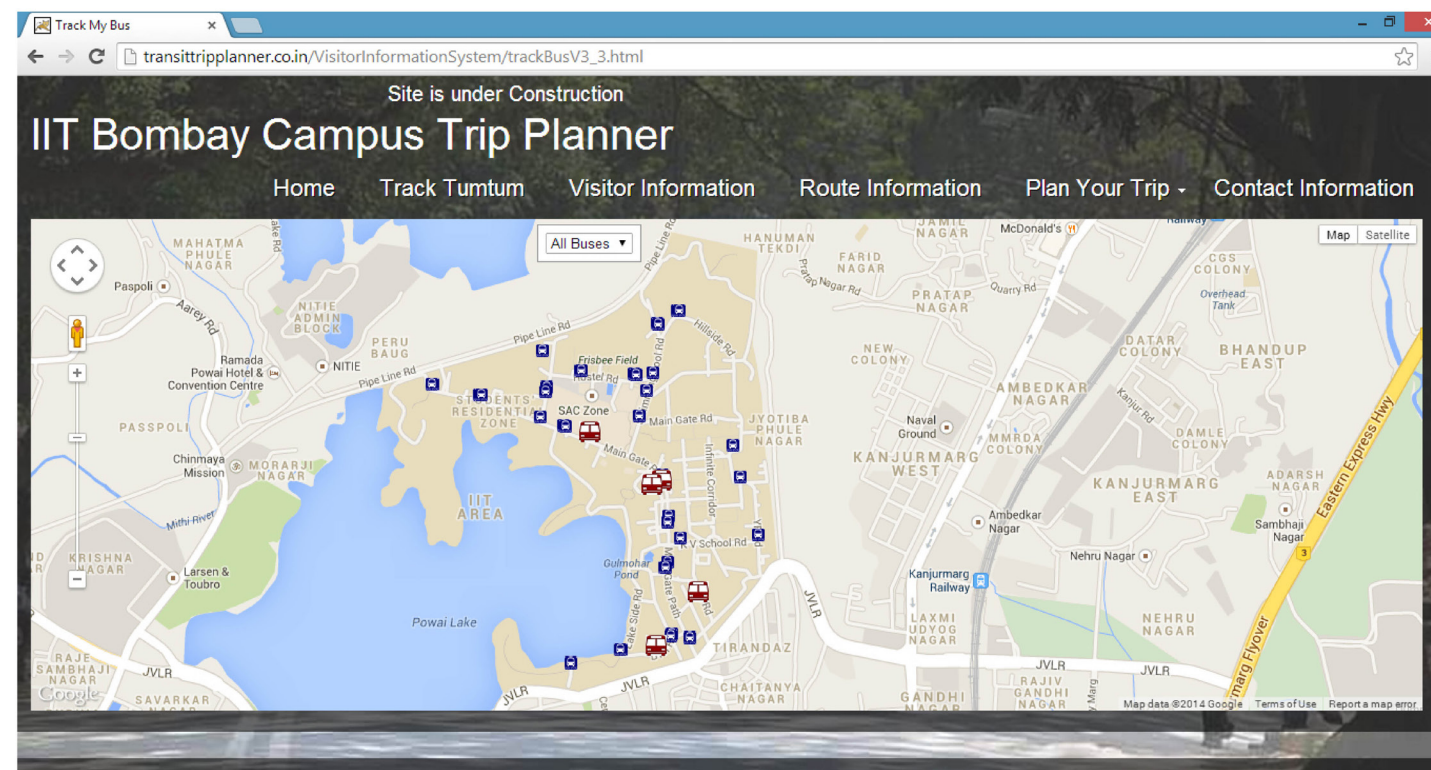


# Earlier interface



## Observations

Unnecessary display of information such as bus stops and live bus tracking information. Such data can be hidden from the user to avoid clutter and enhance the visual experience of the user without overloading information to the user.



Courtesy: <http://transittripplanner.co.in/VisitorInformationSystem/>

# WEBSITE

Final Project

## Objective

Person travels from point A to point B in minimum time within the IIT Bombay campus.



## Target Audience





1. Students
2. Staff
3. Faculty
4. Residents
5. Visitors

The prerequisite is that the above users must have access to a smartphone / desktop computer / tablet with an internet connection.

## Technical Prerequisites

1. Responsive design
2. Internet connection
3. Additional hardware
  - i) GPS (Global Positioning System) co-ordinate locator
  - ii) Touch screen input
4. Devices and Operating Systems
  - i) Mobile - iOS, Android, Windows, Blackberry
  - ii) Tablet - iOS, Android, Windows
  - iii) Desktop Computer - Mac, Windows, Ubuntu

# Legend

- Walking route 
- Vehicular route 
- Origin / Destination 
- Bus stop 





IIT Bombay  
Transit

1 Colour Code

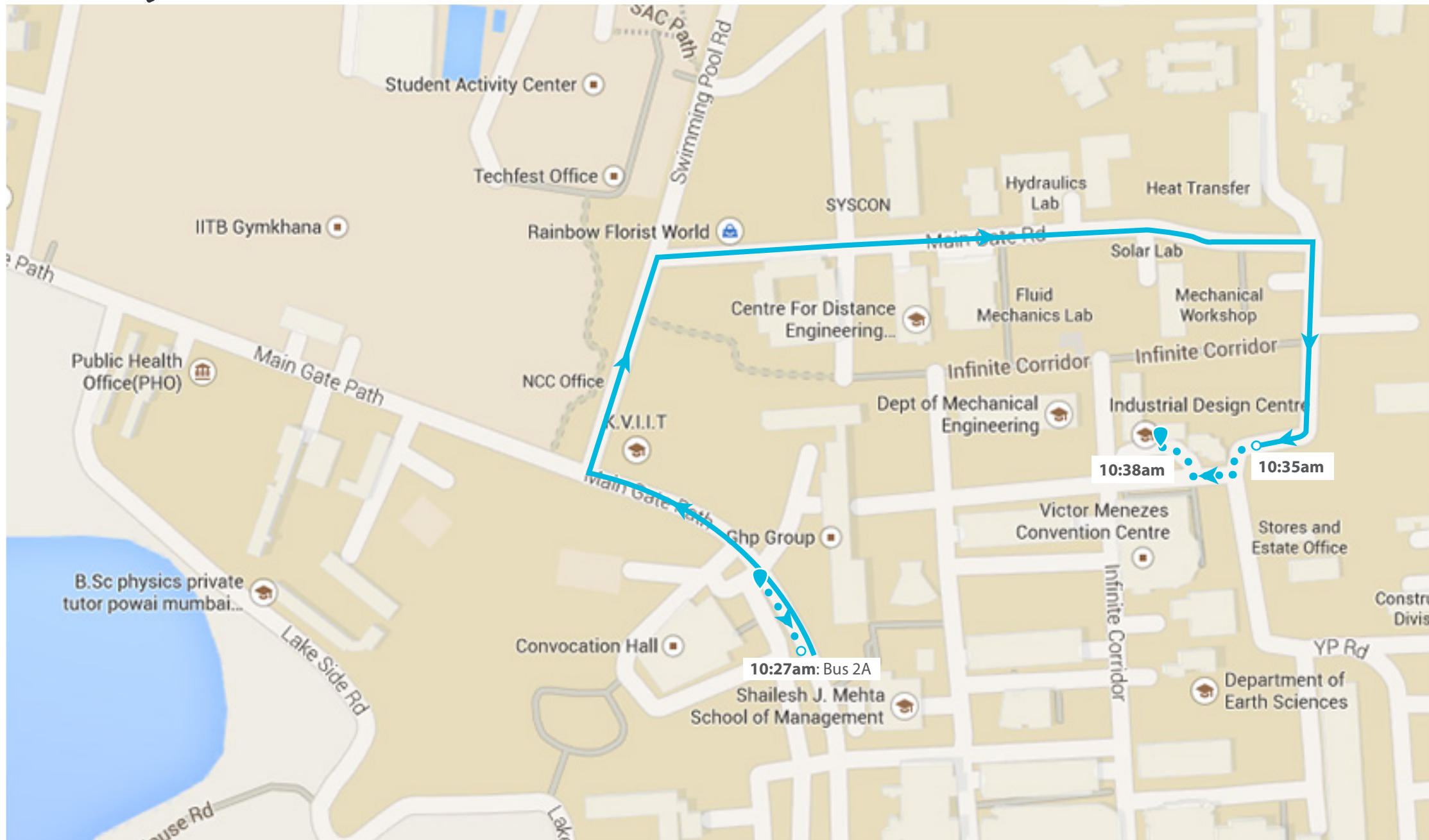


From

Convocation Hall

To

Industrial Design Centre



Now



18°C

Next 2 hrs



15°C

Route

**Walk South East**

towards Bus Stop near Shailesh  
J Mehta School of Management

**10:27am**

Board **Bus 2A**

**10:35am**

Reach bus stop near Shishu Vihar

**Walk South West**

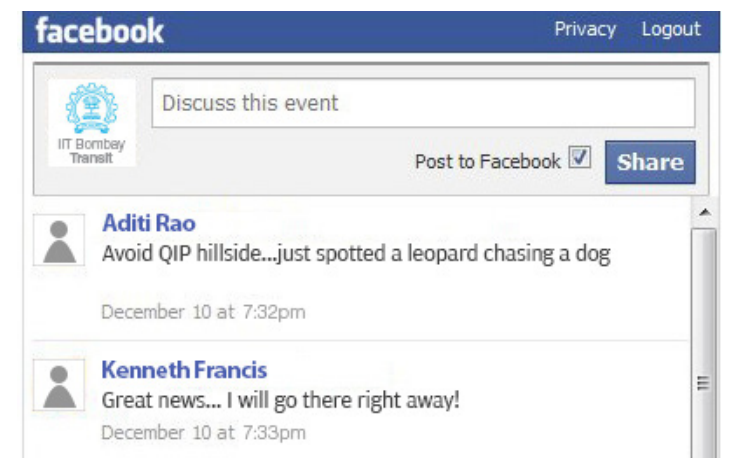
towards IDC main gate

Turn right

Turn right

**10:38am**

Reach IDC Main Gate





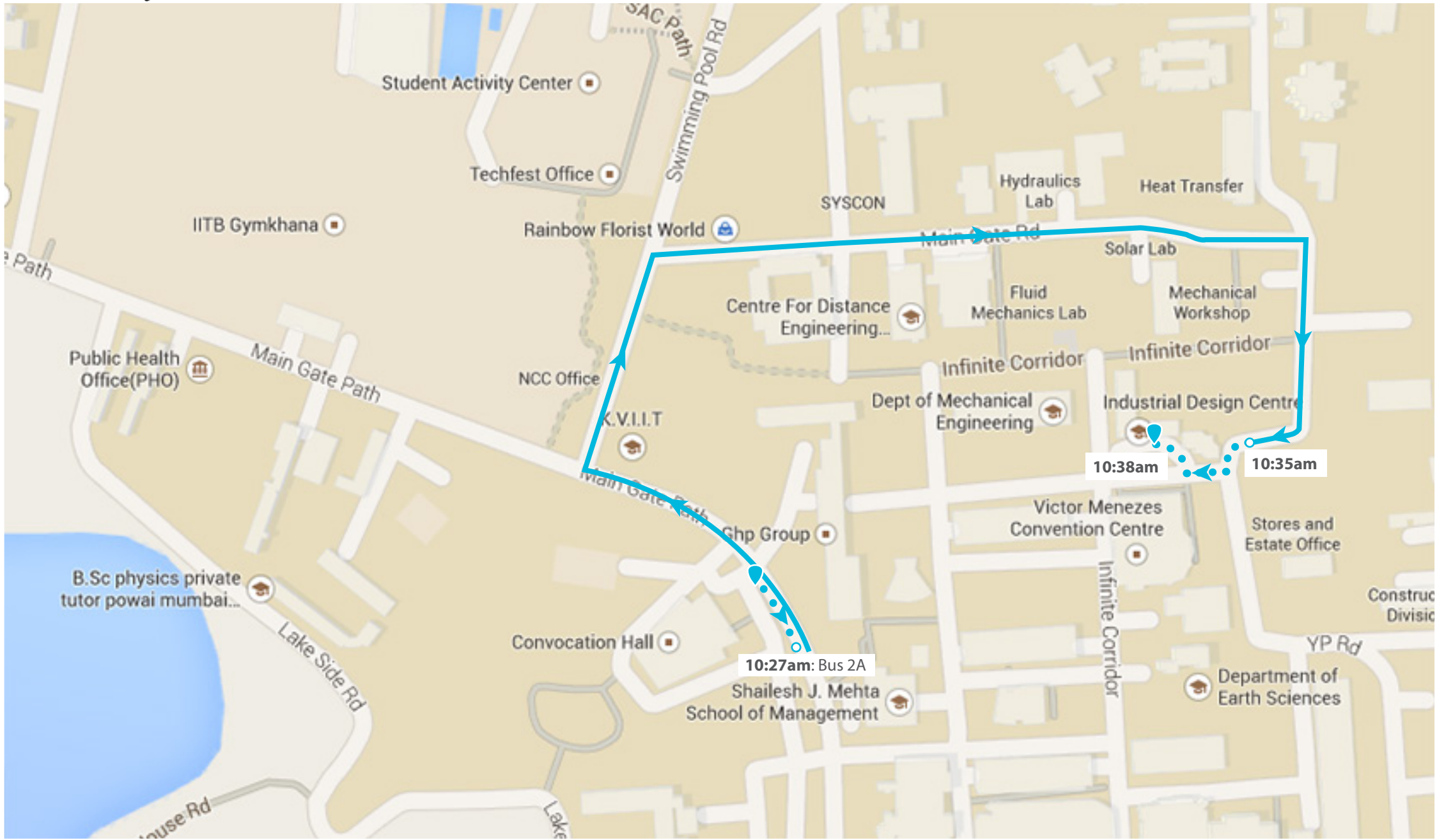
IIT Bombay  
Transit

Opacity : 50% when unselected



From

To



Now

Next 2 hrs

18°C

15°C

Route

**Walk South East**  
towards Bus Stop near Shailesh J Mehta School of Management

**10:27am**  
Board **Bus 2A**

**10:35am**  
Reach bus stop near Shishu Vihar

**Walk South West**  
towards IDC main gate

Turn right

Turn right

**10:38am**  
Reach IDC Main Gate

facebook Privacy Logout

Discuss this event

Post to Facebook ☒ Share

**Aditi Rao**  
Avoid QIP hillside...just spotted a leopard chasing a dog  
December 10 at 7:32pm

**Kenneth Francis**  
Great news... I will go there right away!  
December 10 at 7:33pm



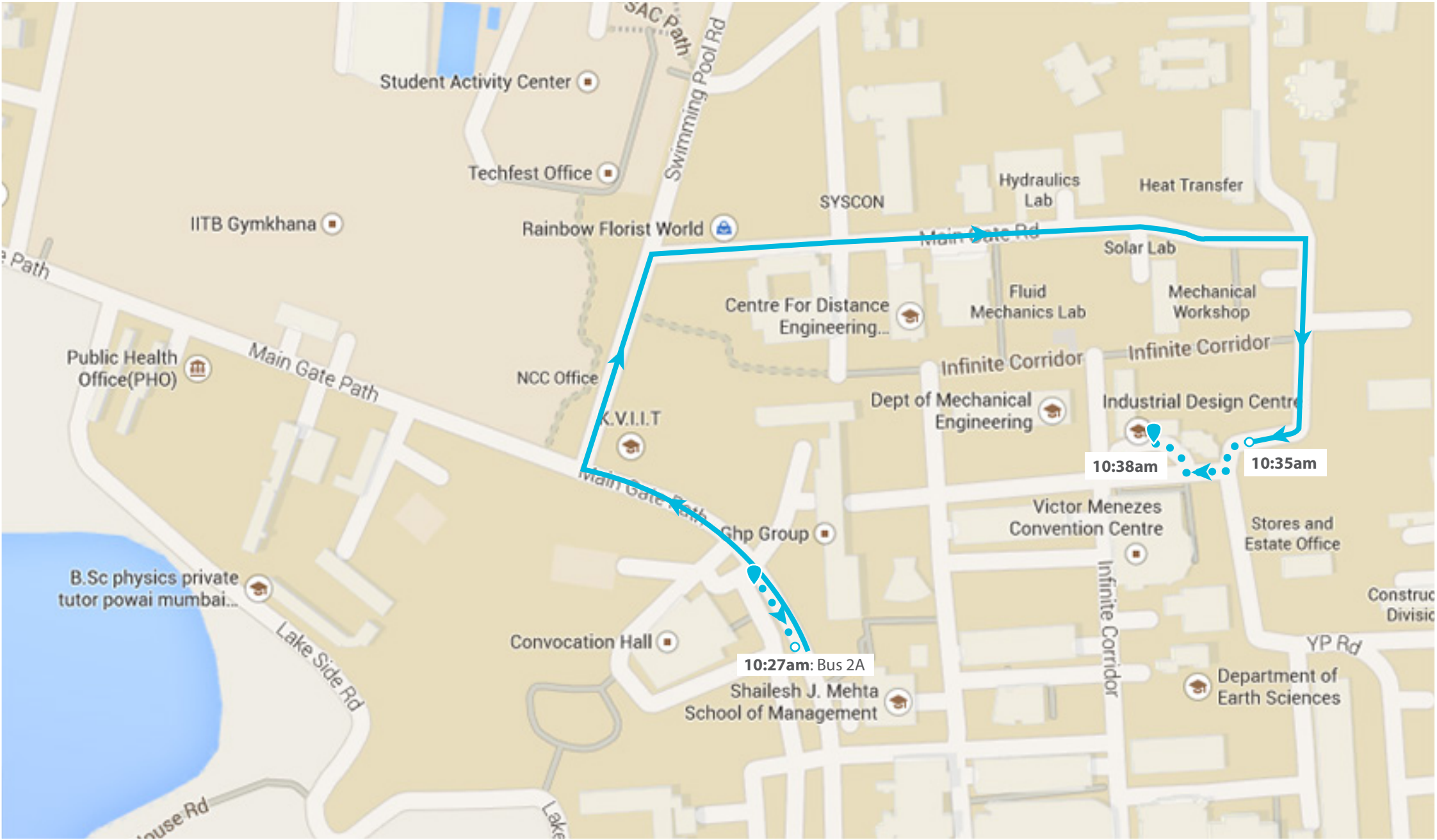


From

Convocation Hall

To

Industrial Design Centre



Now

18°C

Next 2 hrs

15°C

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Turn right

Turn right

**10:38am**  
Reach IDC Main Gate



Directions

facebook

Privacy Logout

Discuss this event

Post to Facebook ☒ **Share**

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December 10 at 7:32pm

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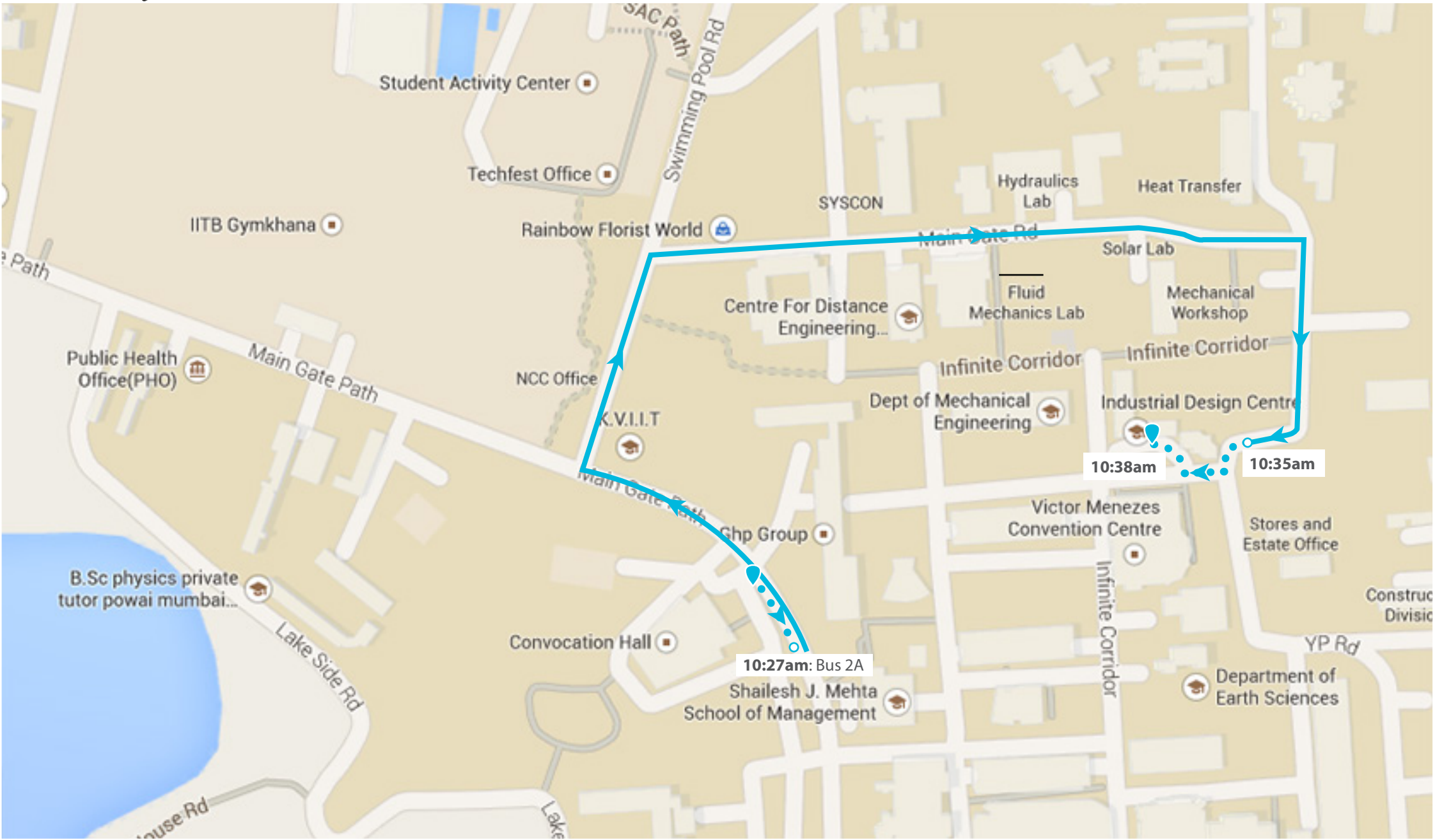
IIT Bombay  
Transit

From

Convocation Hall

To

Industrial Design Centre



Output column  
on the right

Route

**Walk South East**  
towards Bus Stop near Shailesh  
J Mehta School of Management

**10:27am**  
Board **Bus 2A**

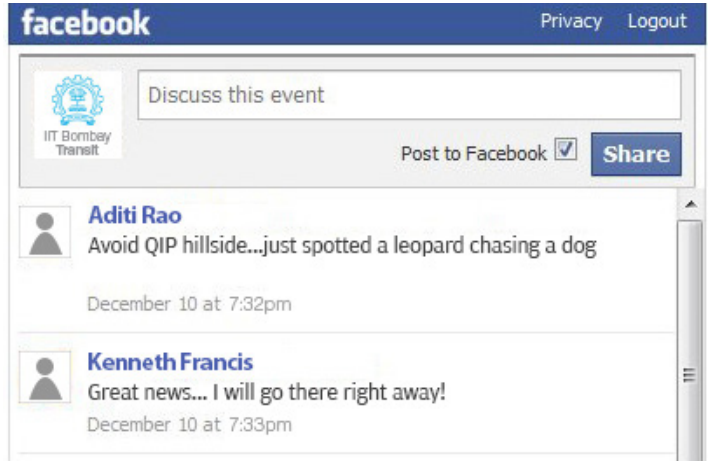
**10:35am**  
Reach bus stop near Shishu Vihar

**Walk South West**  
towards IDC main gate

Turn right

Turn right

**10:38am**  
Reach IDC Main Gate



Now

18°C

Next 2 hrs

15°C



IIT Bombay  
Transit

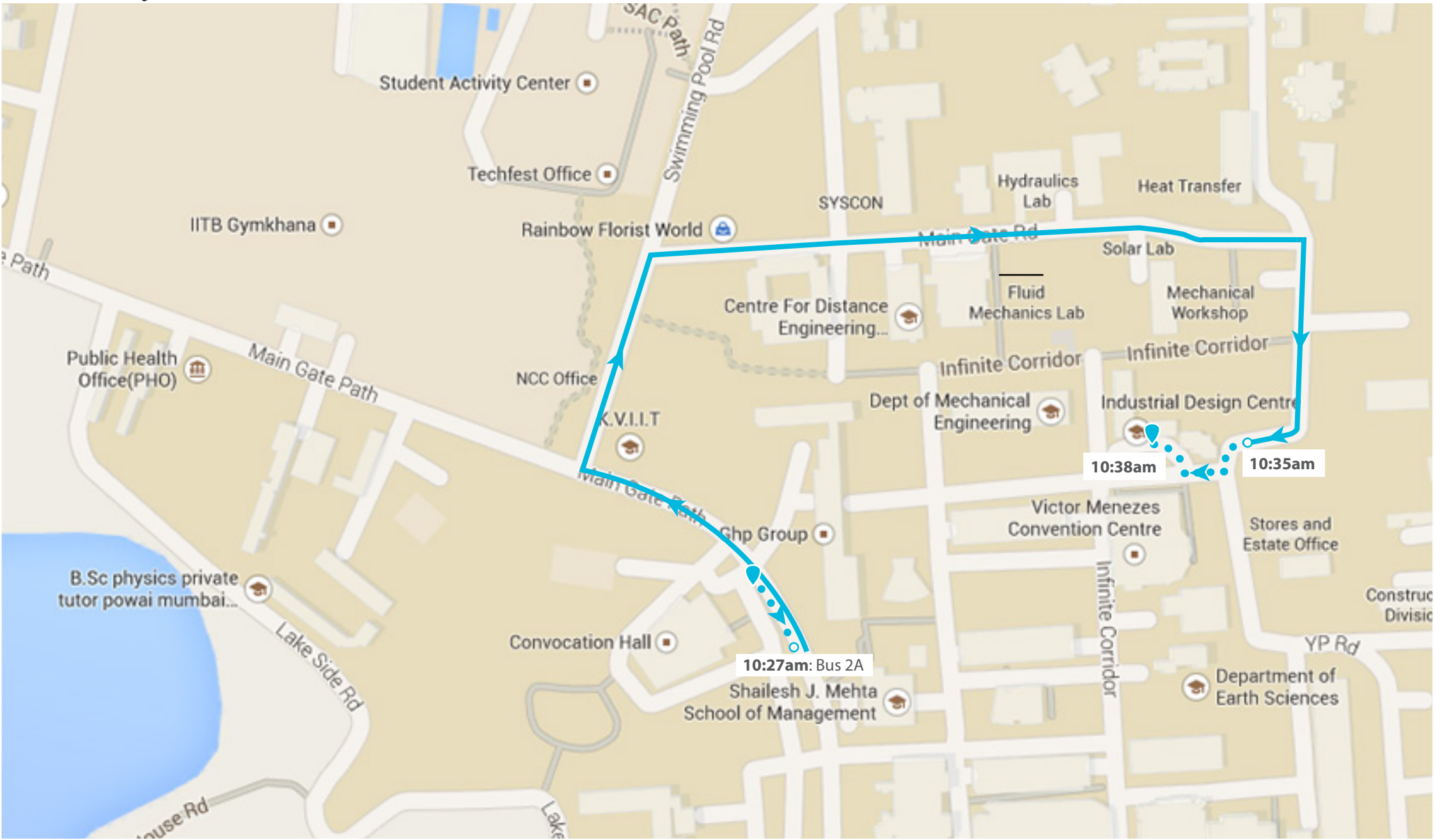
Input text fields do not  
interfere with the map

From

Convocation Hall

To

Industrial Design Centre



Now



18°C

Next 2 hrs



15°C

Route

**Walk South East**

towards Bus Stop near Shailesh  
J Mehta School of Management

**10:27am**

Board **Bus 2A**

**10:35am**

Reach bus stop near Shishu Vihar

**Walk South West**

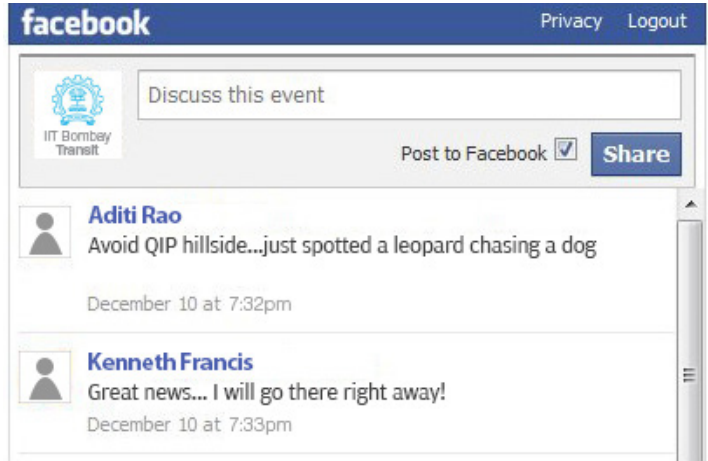
towards IDC main gate

Turn right

Turn right

**10:38am**

Reach IDC Main Gate







IIT Bombay  
Transit

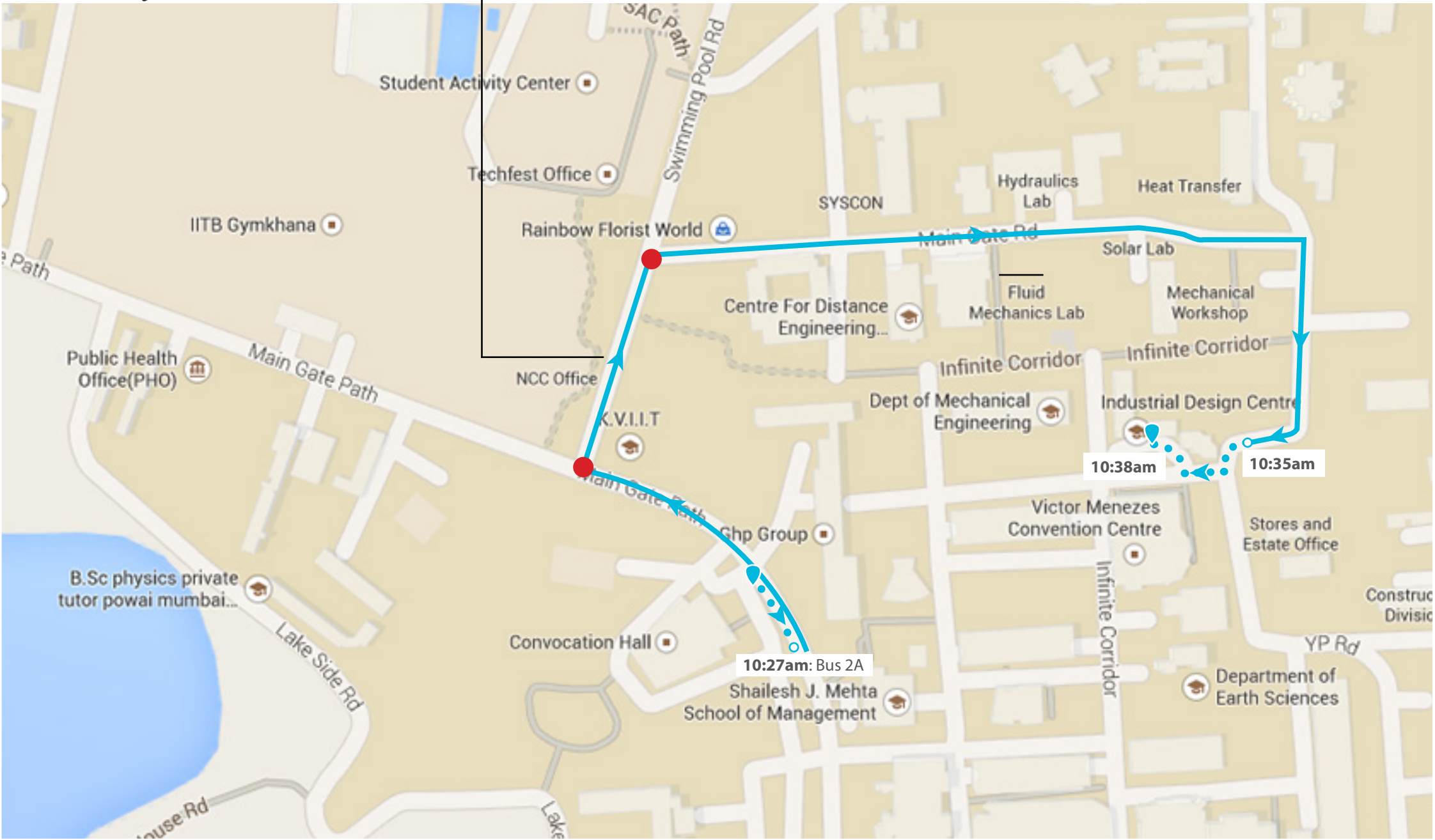
Arrows located at the centre of  
every route segment

From

Convocation Hall

To

Industrial Design Centre



Now

18°C

Next 2 hrs

15°C

- Route
- Walk South East

towards Bus Stop near Shailesh J Mehta School of Management

↘

10:27am

Board **Bus 2A**

10:35am

Reach bus stop near Shishu Vihar

Walk South West

towards IDC main gate

↙

Turn right

↘

Turn right

↘

10:38am

Reach IDC Main Gate
- facebook

Privacy Logout

Discuss this event

Post to Facebook ☒ **Share**

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IIT Bombay  
Transit

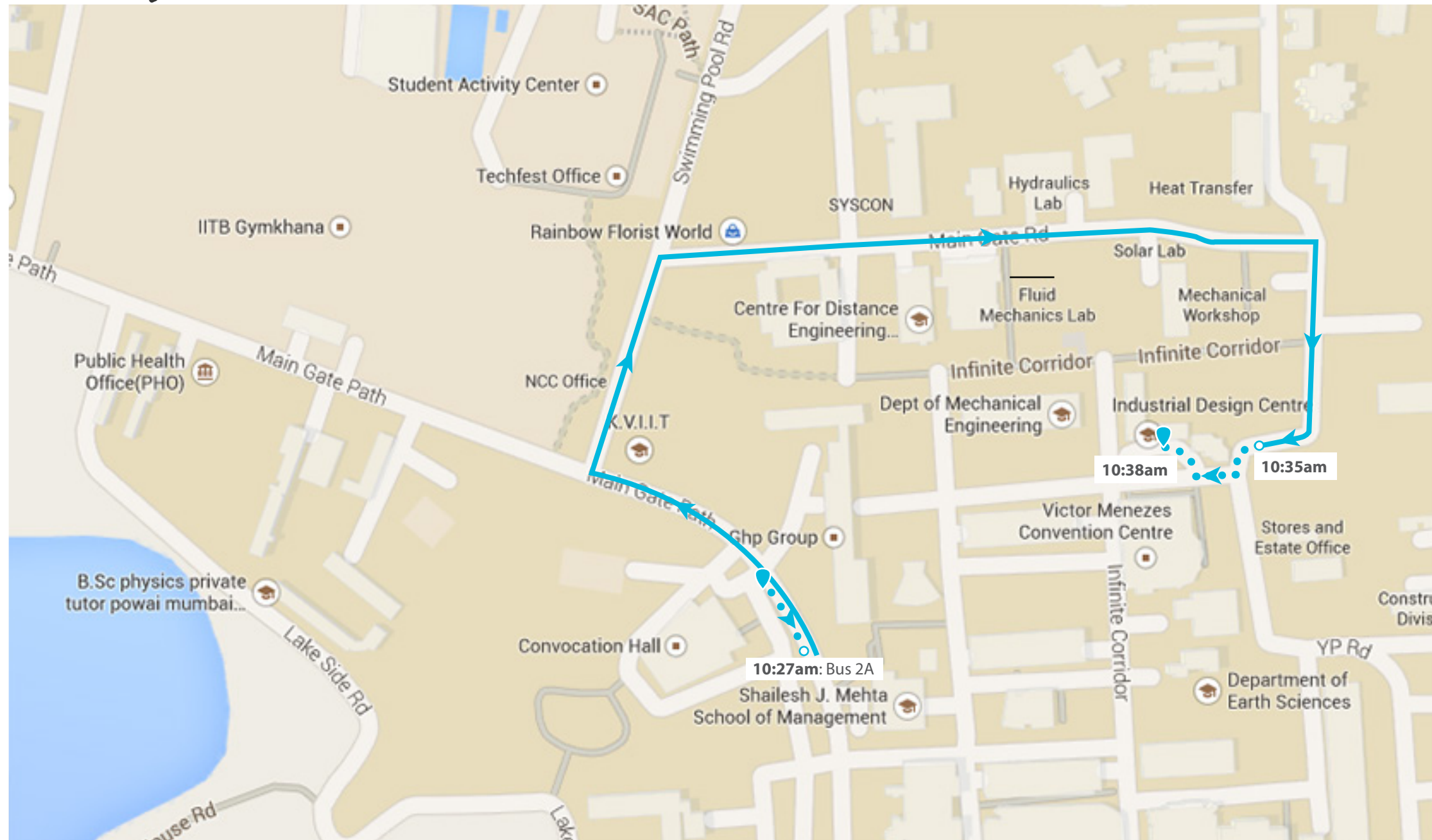
Plugin for local weather updates

Now  
18°C  
Next 2 hrs  
15°C



From Convocation Hall

To Industrial Design Centre



Route

**Walk South East**  
towards Bus Stop near Shailesh  
J Mehta School of Management

**10:27am**  
Board **Bus 2A**

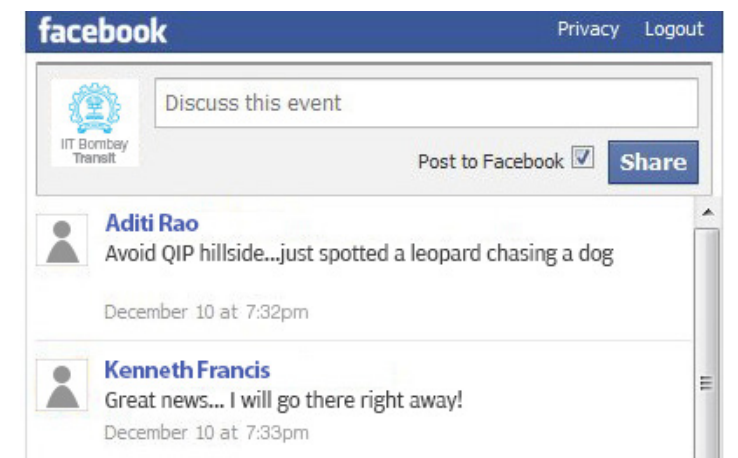
**10:35am**  
Reach bus stop near Shishu Vihar

**Walk South West**  
towards IDC main gate

Turn right

Turn right

**10:38am**  
Reach IDC Main Gate



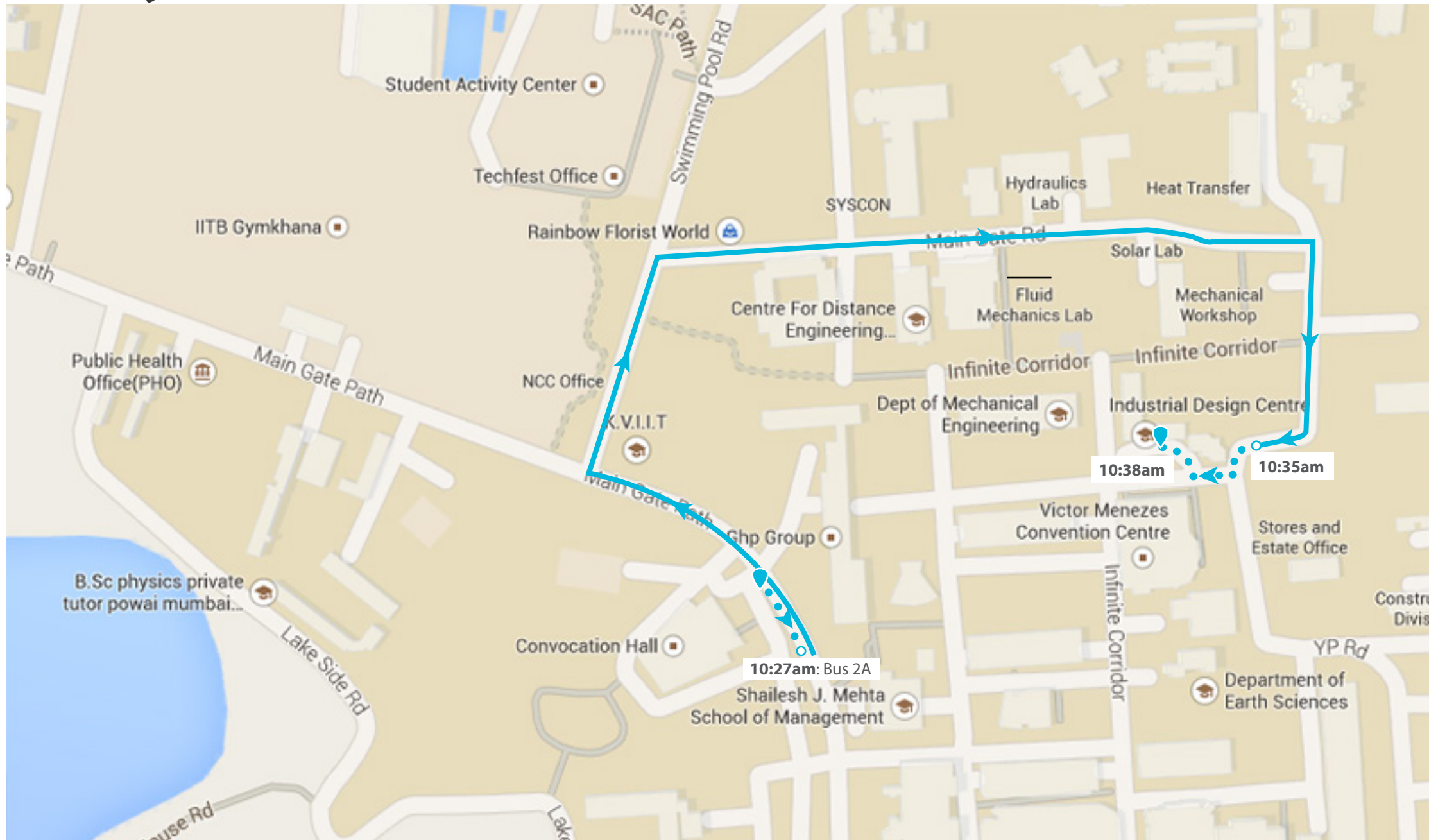


IIT Bombay  
Transit



From Convocation Hall

To Industrial Design Centre



Social Network plugin

Now Next 2 hrs  
18°C 15°C

Route

**Walk South East**  
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J Mehta School of Management

**10:27am**  
Board **Bus 2A**

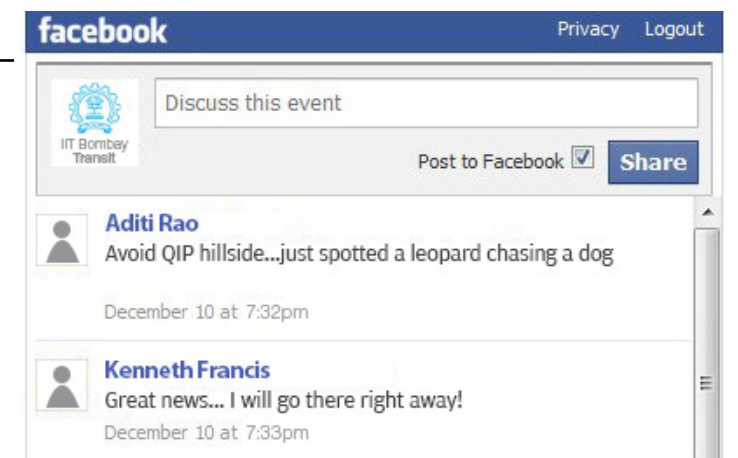
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**Walk South West**  
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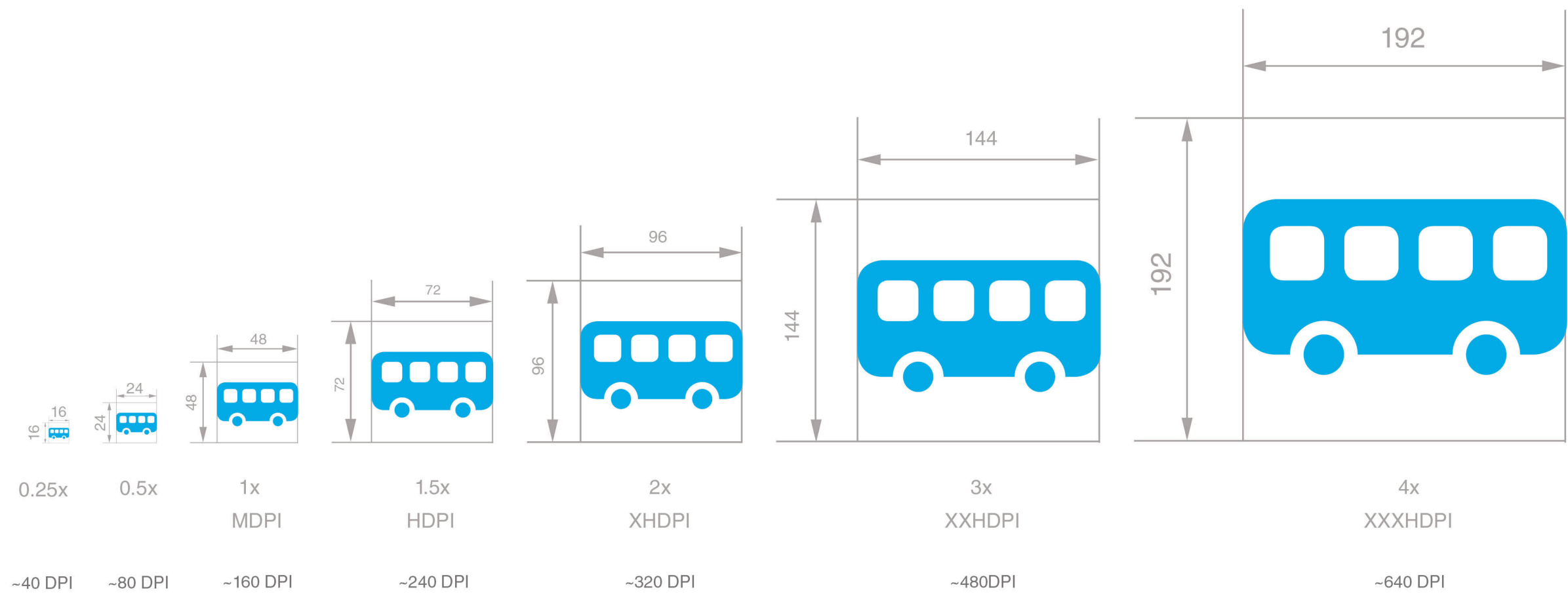
Turn right

**10:38am**  
Reach IDC Main Gate



# Iconography

## Bus

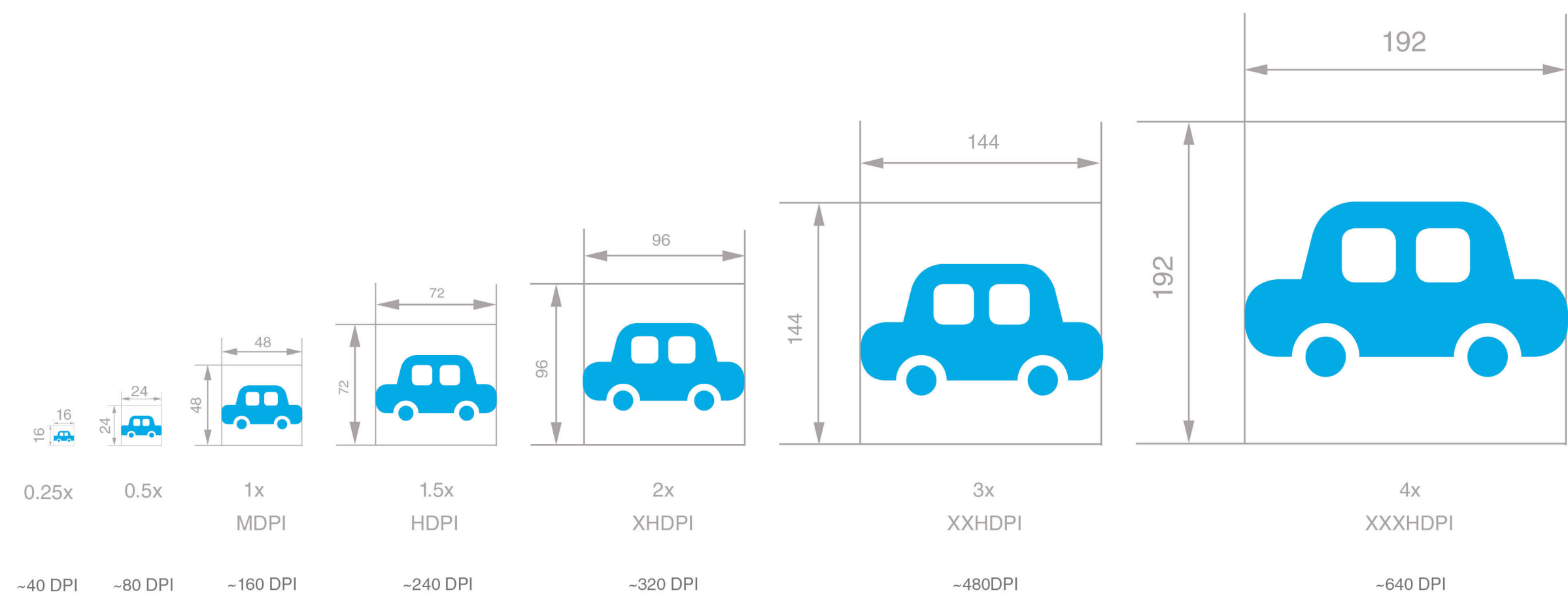


\*All measurements are in pixels



# Iconography

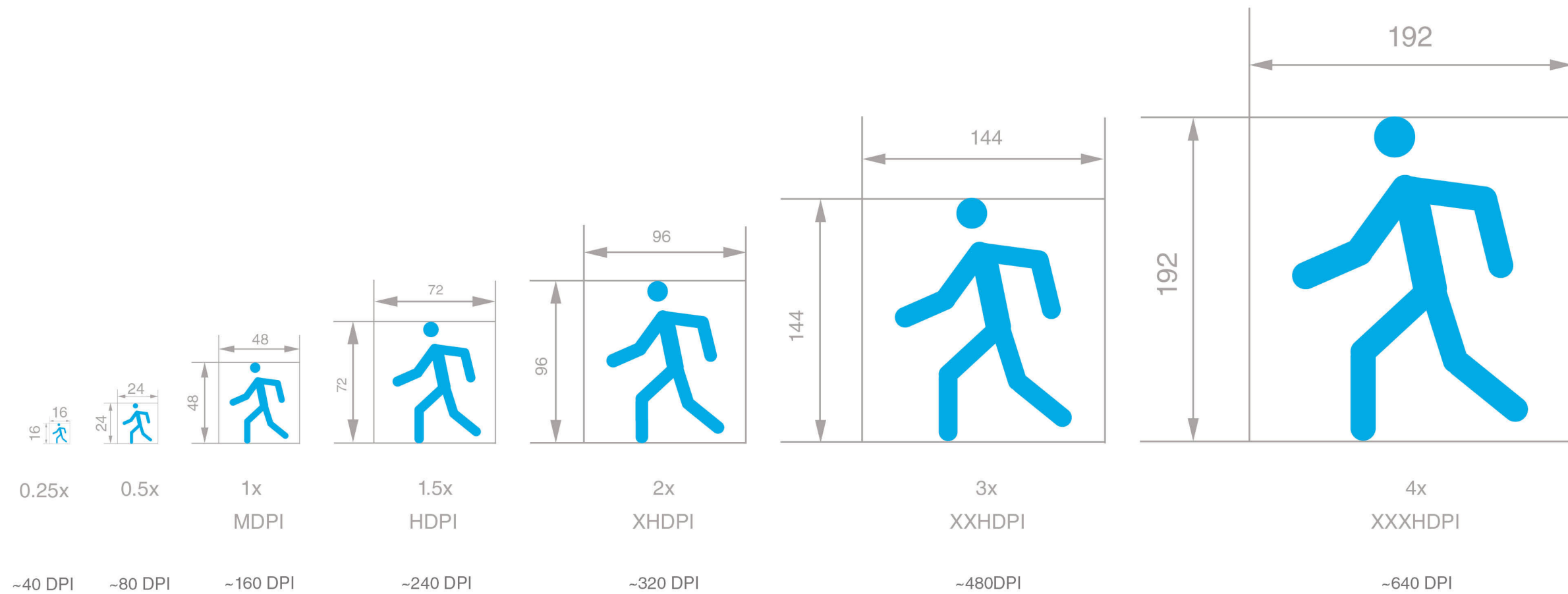
## Car



\*All measurements are in pixels

# Iconography

## Pedestrian



\*All measurements are in pixels

# WEBSITE SCENARIOS

Nine



## **Scenario 1**

**Input by user :** Type

**Output to user :** 4 formats

### **Assumptions:**

- i) Absence of GPS.
- ii) Absence of touchscreen input.



From

To



facebook

PrivacyLogout

Discuss this event

Post to Facebook

Share

Aditi Rao

Avoid QIP hillside...just spotted a leopard chasing a dog

December 10 at 7:32pm

Kenneth Francis

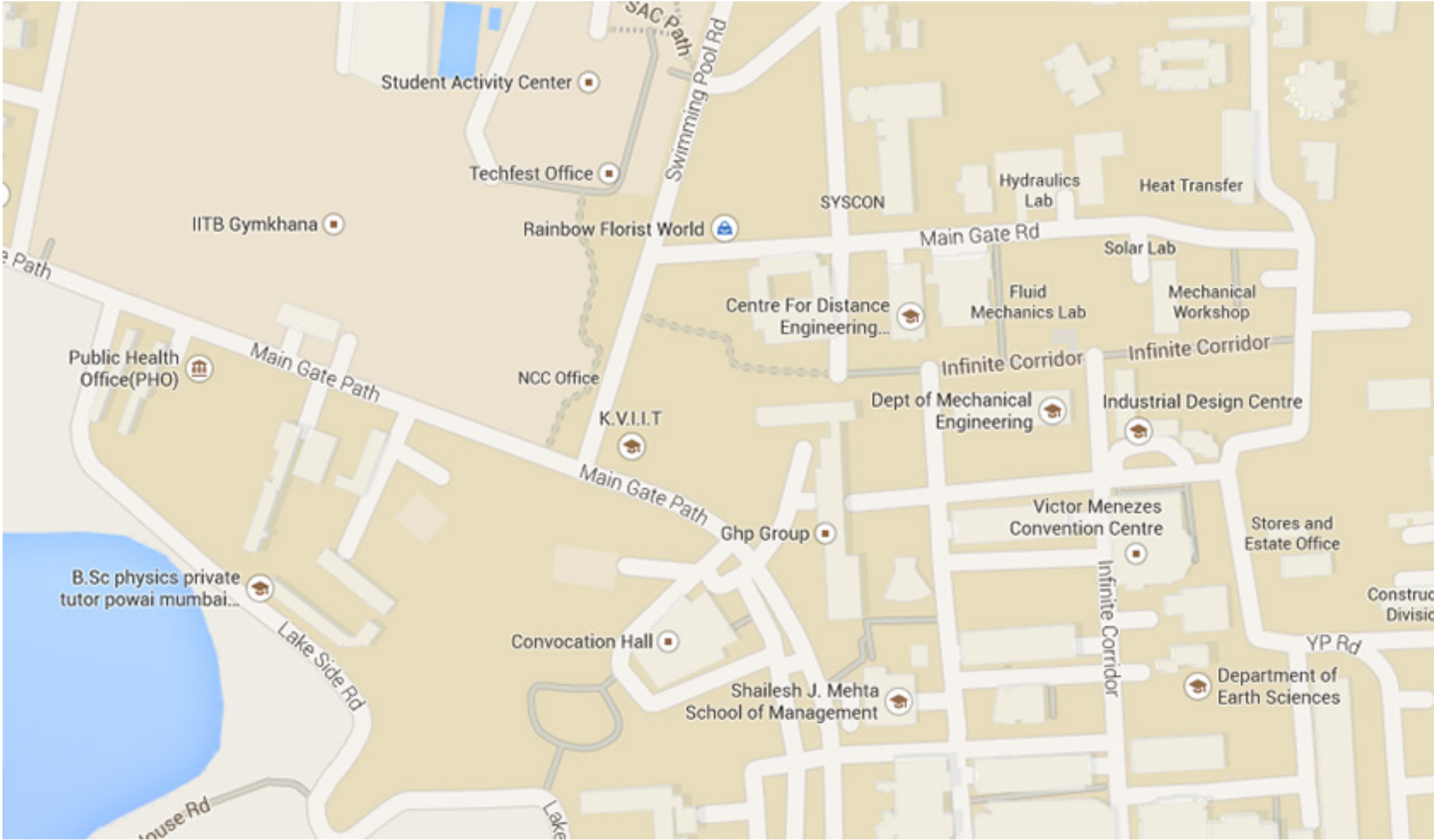
Great news... I will go there right away!

December 10 at 7:33pm



From

To



facebook

Privacy Logout

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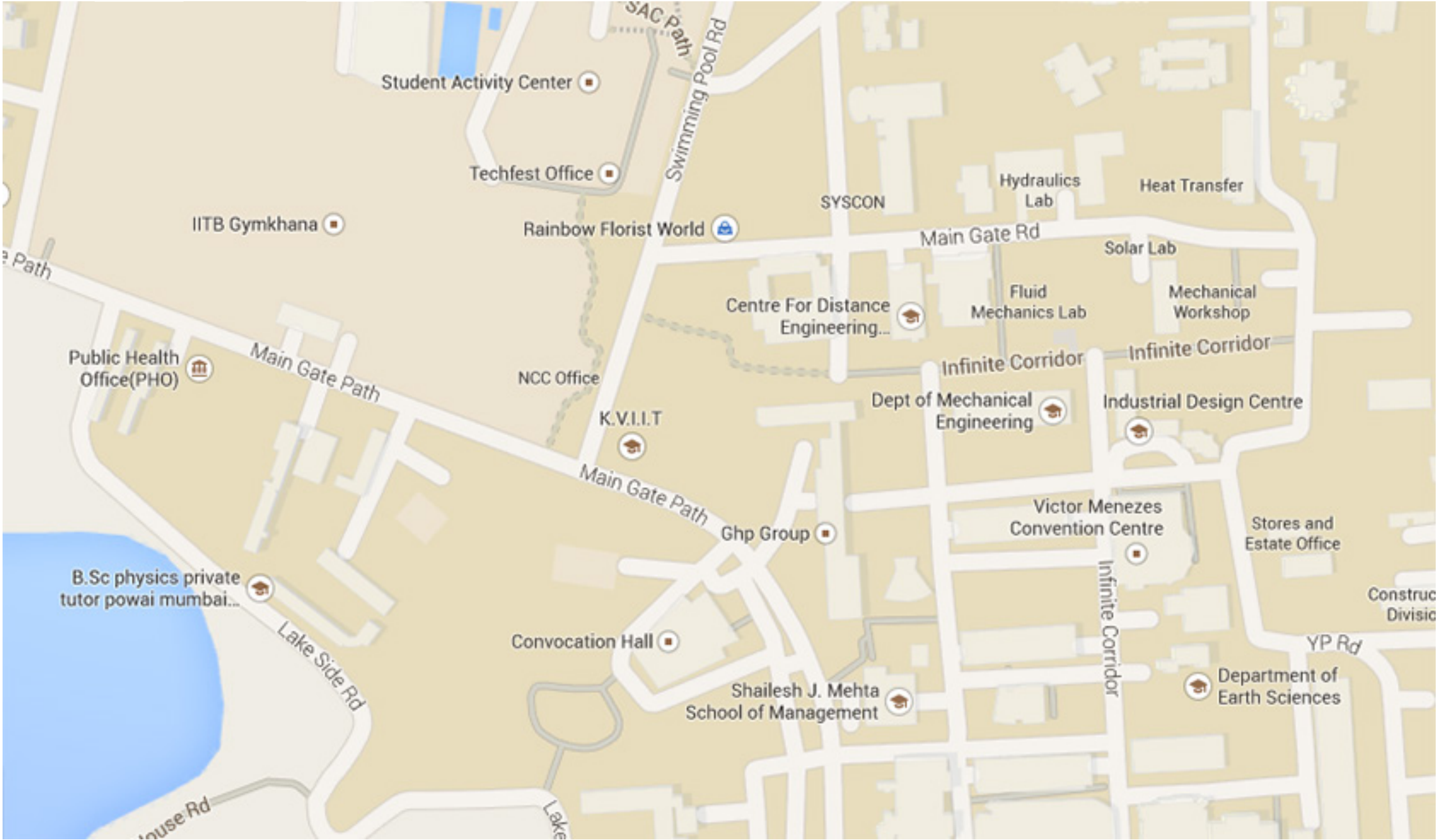


From

Convo

To

Convocation Hall



facebook

Privacy Logout



Discuss this event

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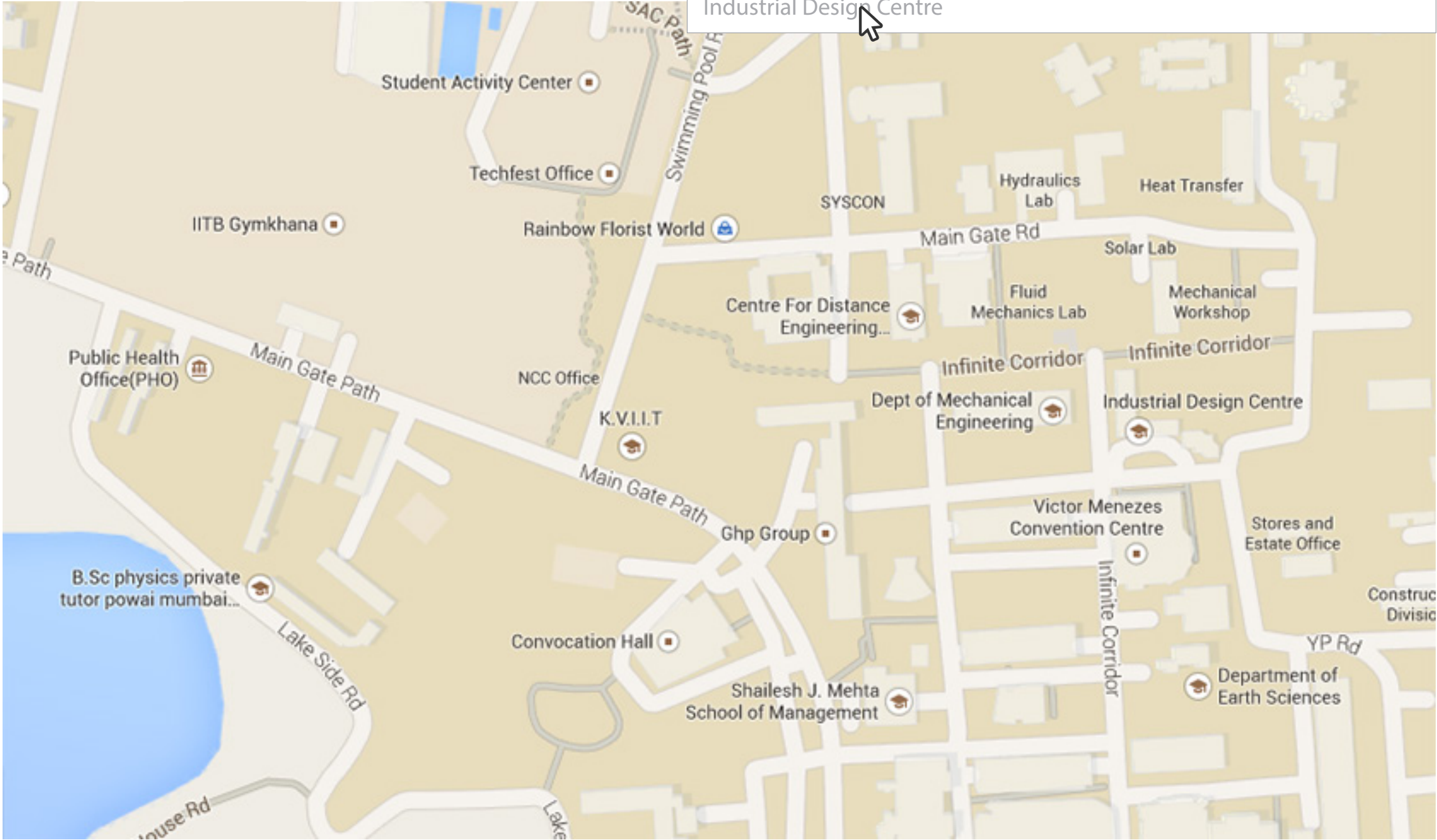
December 10 at 7:33pm



From Convocation Hall

To Industr

Industrial Design Centre



facebook Privacy Logout

Discuss this event

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Great news... I will go there right away!  
December 10 at 7:33pm



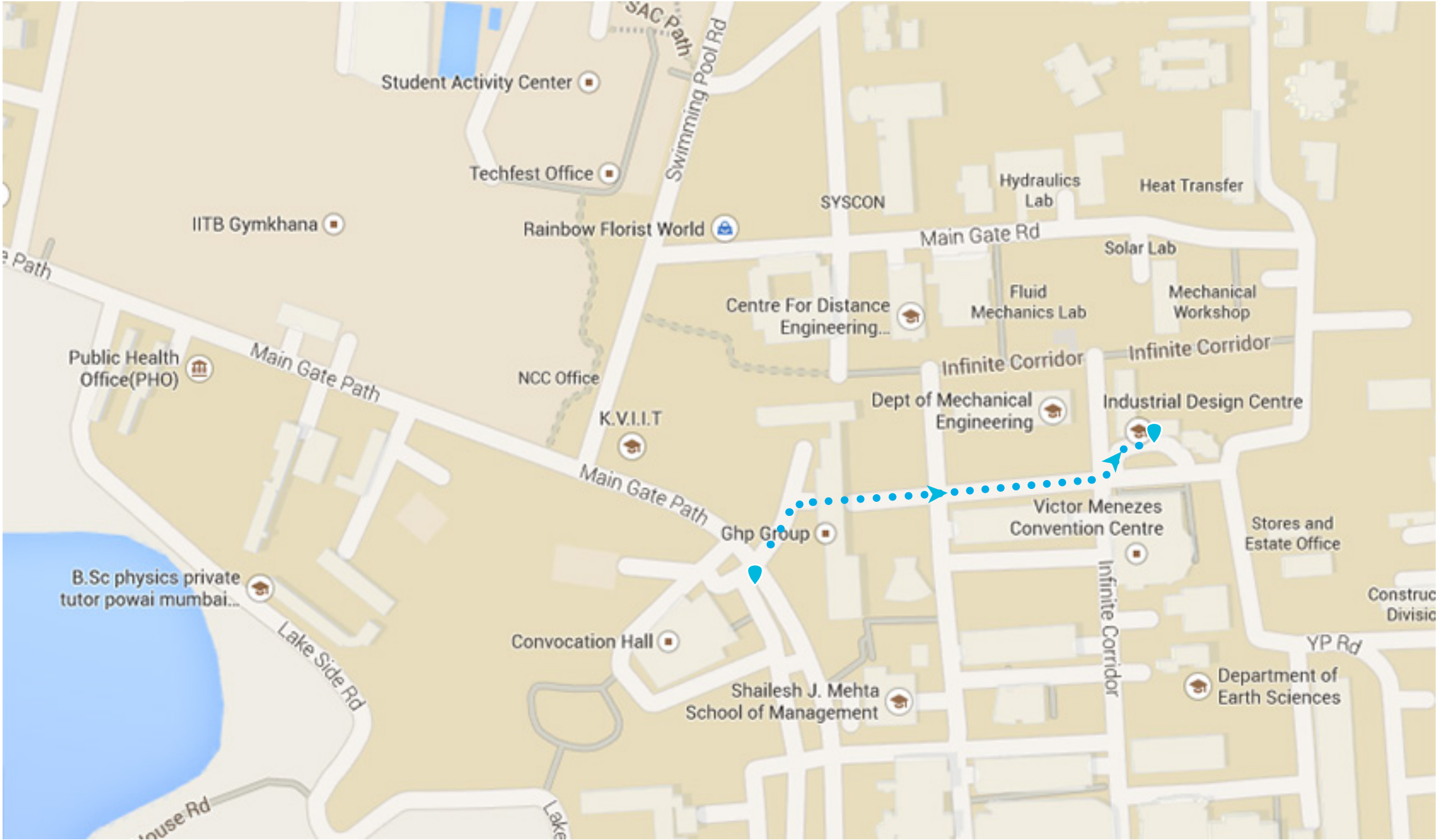


From

Convocation Hall

To

Industrial Design Centre



Route

Shortest mode of travel: **Walk**

**10:25am**  
Reach Industrial Design Centre

facebook

Privacy Logout

Discuss this event

Post to Facebook ☒

Share

Aditi Rao

Avoid QIP hillside...just spotted a leopard chasing a dog

December 10 at 7:32pm

Kenneth Francis

Great news... I will go there right away!

December 10 at 7:33pm



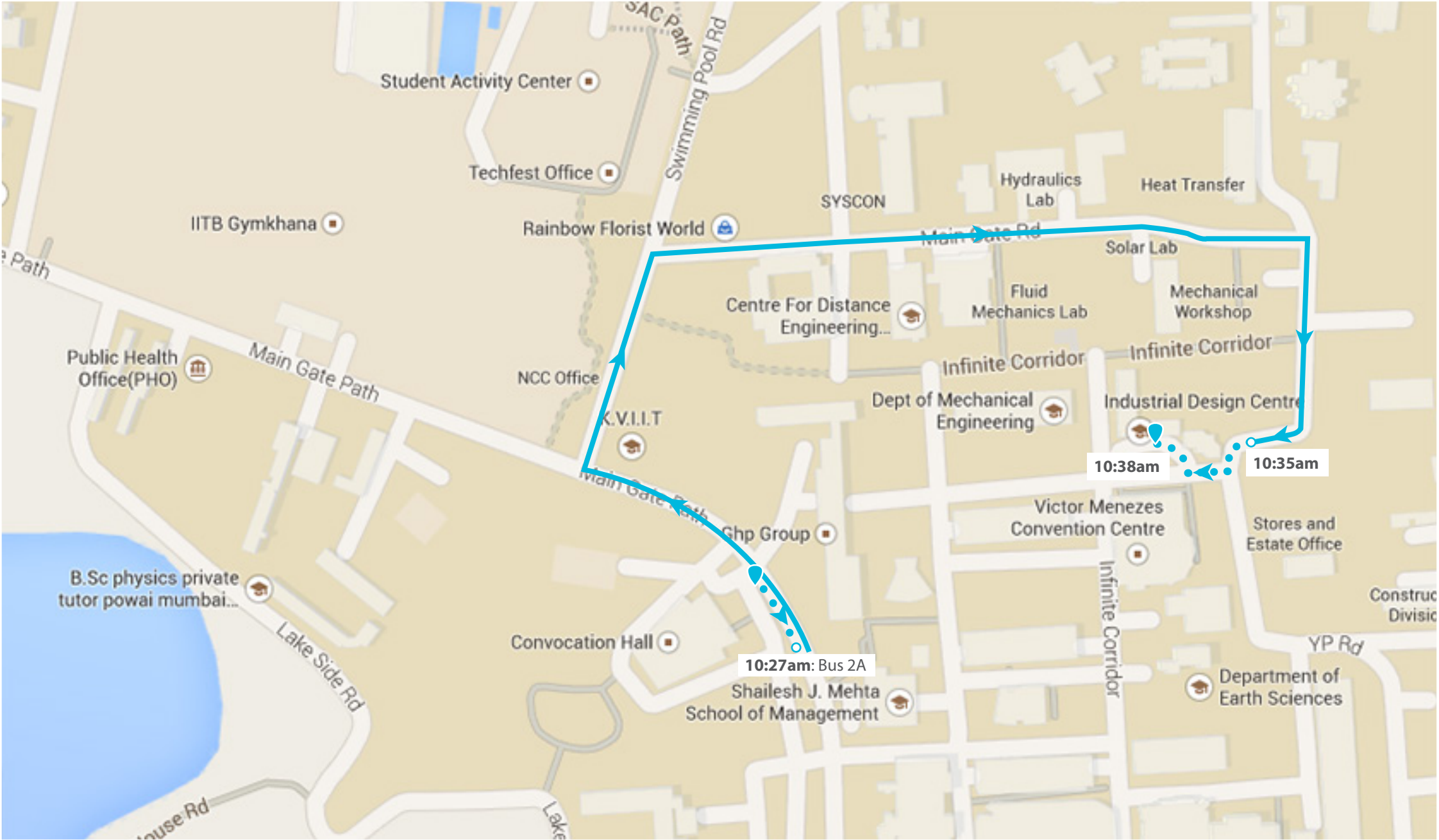


From

Convocation Hall

To

Industrial Design Centre



Route

**Walk South East**  
towards Bus Stop near Shailesh J Mehta School of Management

**10:27am**  
Board **Bus 2A**

**10:35am**  
Reach bus stop near Shishu Vihar

**Walk South West**  
towards IDC main gate

Turn right

Turn right

**10:38am**  
Reach IDC Main Gate

facebook

Privacy Logout

Discuss this event

Post to Facebook ☒

Share

**Aditi Rao**

Avoid QIP hillside...just spotted a leopard chasing a dog

December 10 at 7:32pm

**Kenneth Francis**

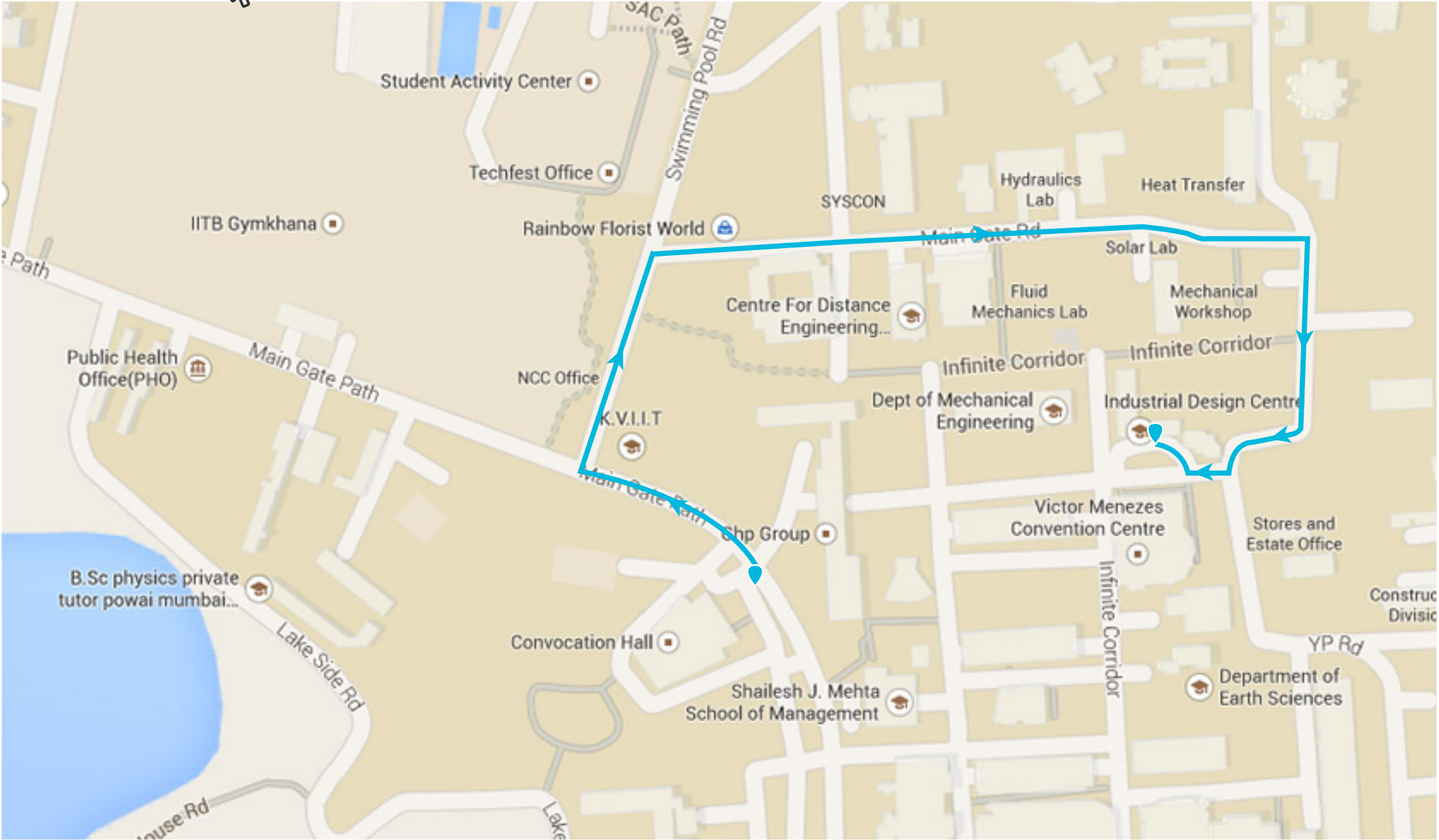
Great news... I will go there right away!

December 10 at 7:33pm



From

To



Route

Drive North West

- Turn right  
towards Swimming Pool Road
- Turn right  
towards Main Gate Road
- Turn right  
towards YP Road
- Turn right  
towards IDC
- Turn right  
Reach IDC main gate

facebook Privacy Logout

Discuss this event

Post to Facebook ☒ Share

**Aditi Rao**  
Avoid QIP hillside...just spotted a leopard chasing a dog  
December 10 at 7:32pm

**Kenneth Francis**  
Great news... I will go there right away!  
December 10 at 7:33pm



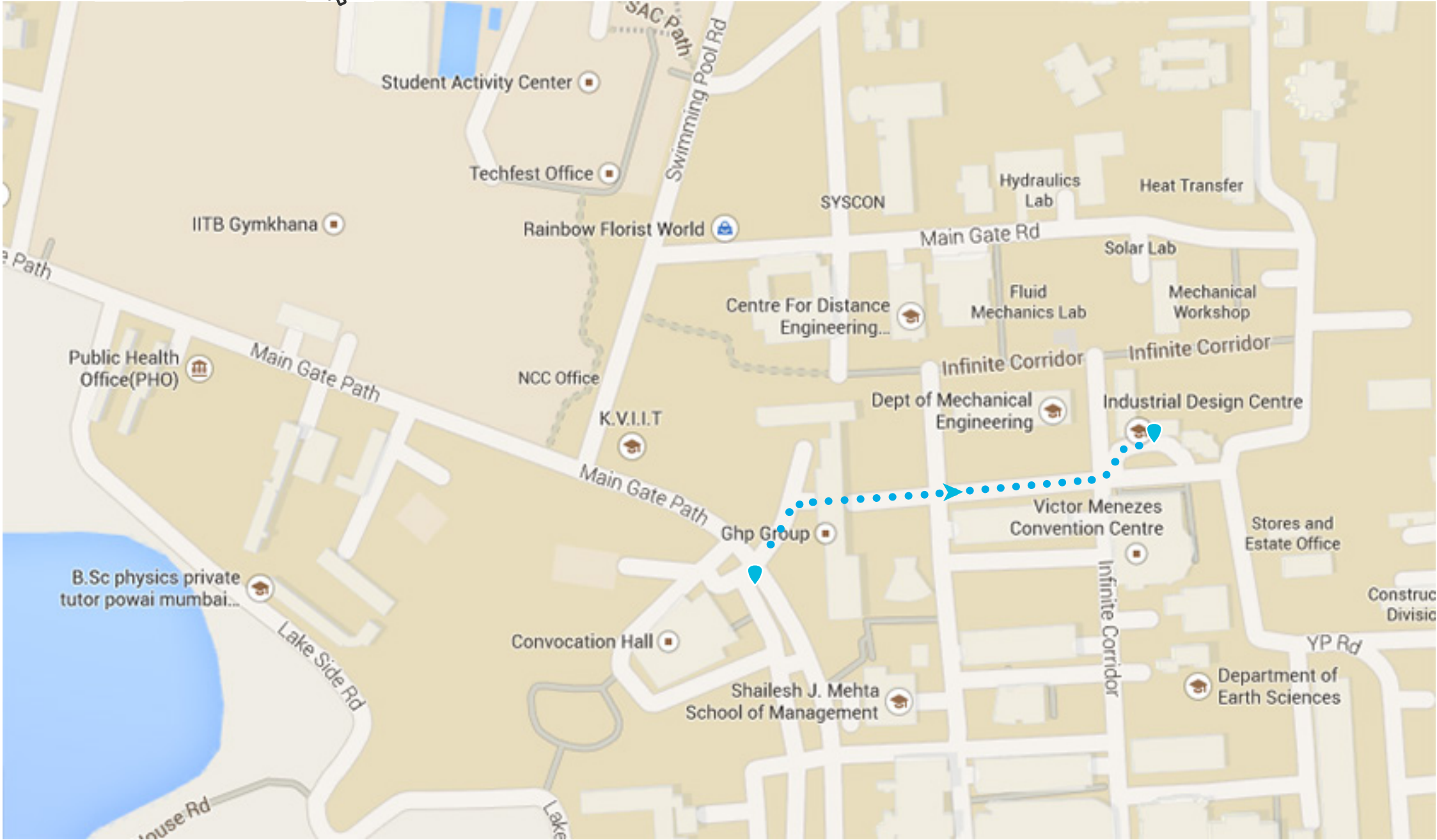


From

Convocation Hall

To

Industrial Design Centre



Route

Shortest mode of travel: **Walk**

**10:25am**  
Reach Industrial Design Centre

facebook

Privacy Logout

Discuss this event

Post to Facebook ☒

Share

Aditi Rao

Avoid QIP hillside...just spotted a leopard chasing a dog

December 10 at 7:32pm

Kenneth Francis

Great news... I will go there right away!

December 10 at 7:33pm



## **Scenario 2**

### **Change of route**

**Input by user :** Type

**Output to user :** Bus route

### **Assumptions:**

- i) Device locates user's position from GPS co-ordinates.
- ii) Absence of touchscreen input.

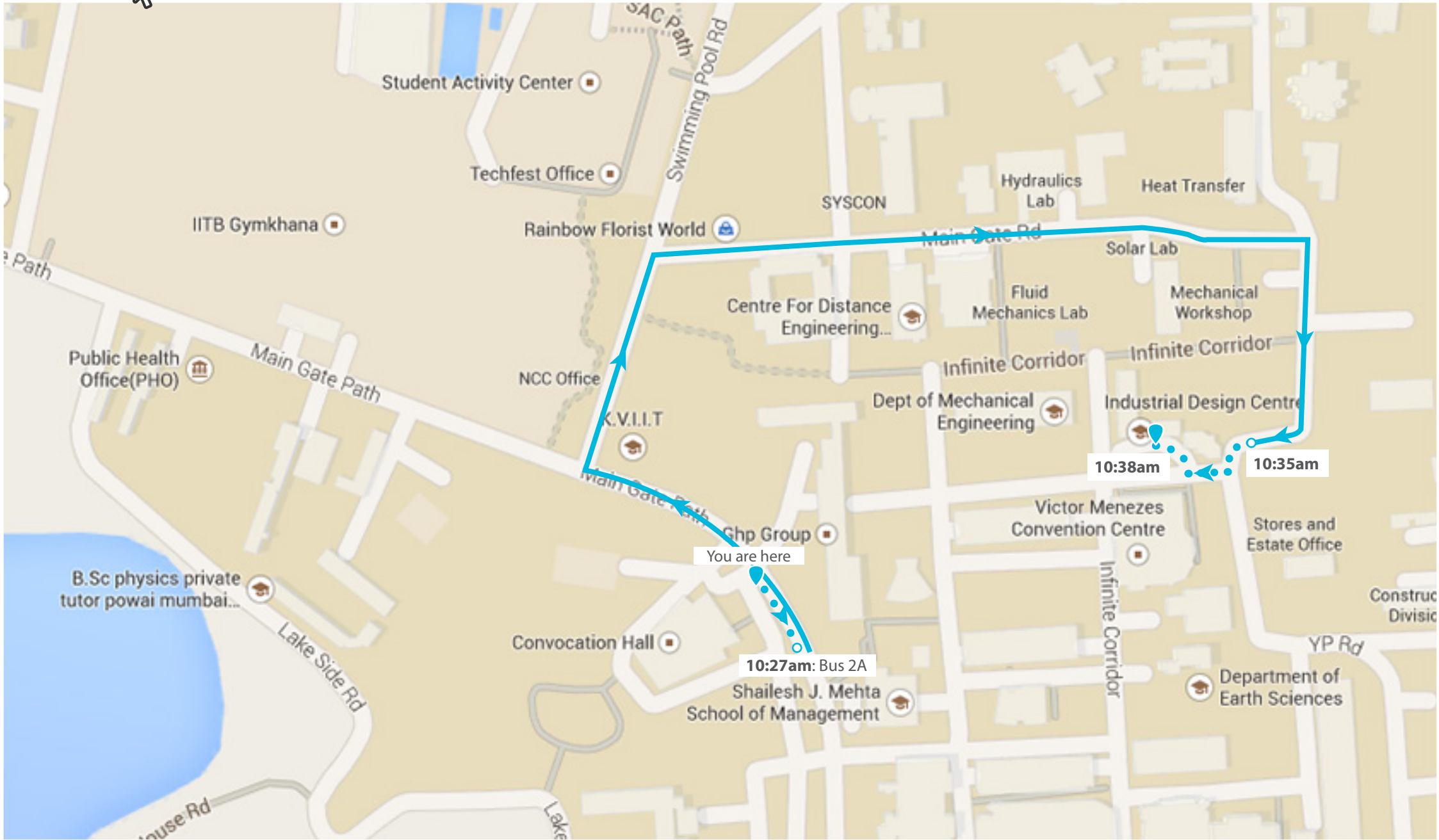


From

Convocation Hall

To

Industrial Design Centre



Route

**Walk South East**  
towards Bus Stop near Shailesh J Mehta School of Management

**10:27am**  
Board **Bus 2A**

**10:35am**  
Reach bus stop near Shishu Vihar

**Walk South West**  
towards IDC main gate

Turn right

Turn right

**10:38am**  
Reach IDC Main Gate

facebook

Privacy Logout

Discuss this event

Post to Facebook ☒ **Share**

**Aditi Rao**  
Avoid QIP hillside...just spotted a leopard chasing a dog  
December 10 at 7:32pm

**Kenneth Francis**  
Great news... I will go there right away!  
December 10 at 7:33pm

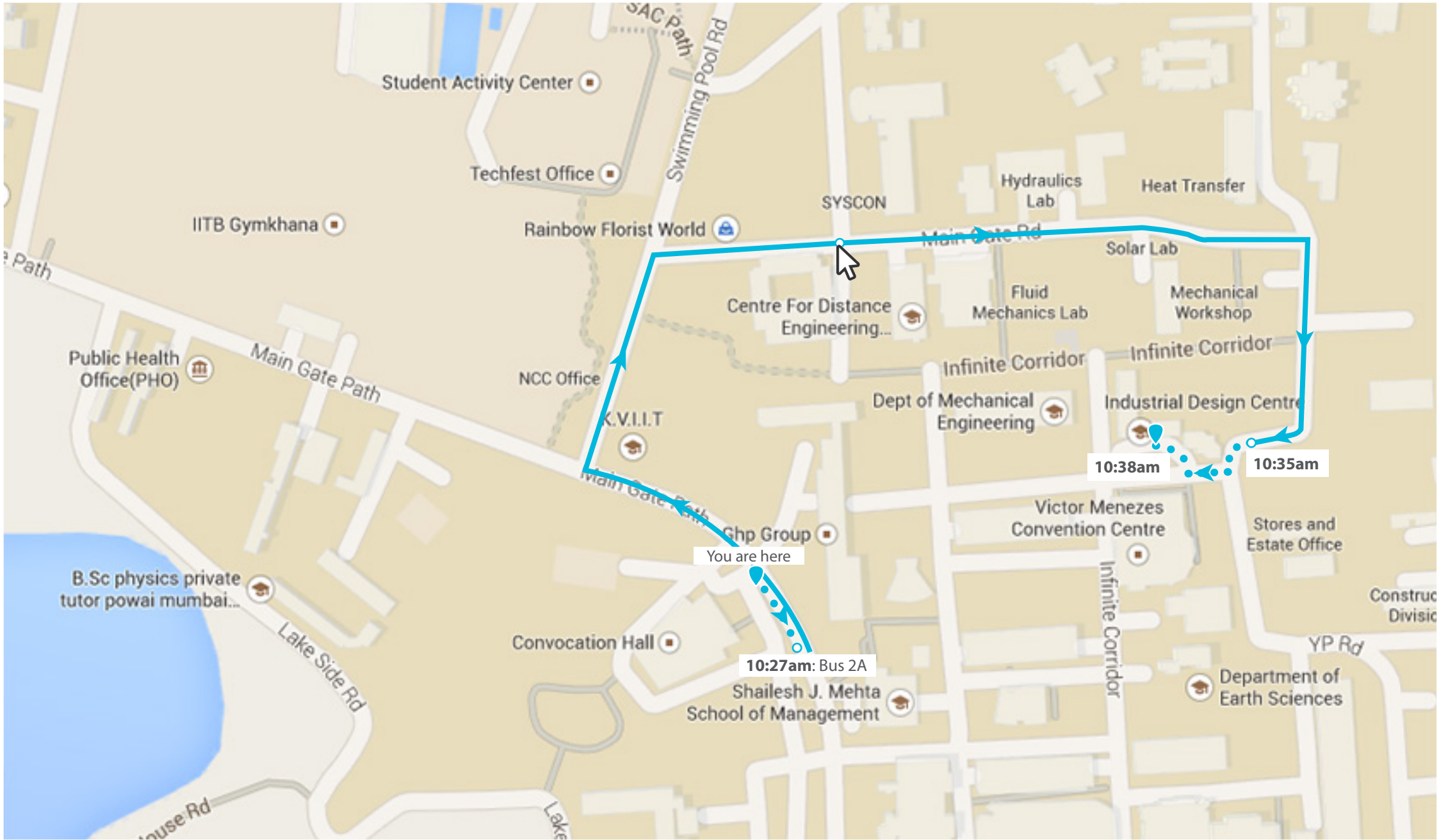


From

Convocation Hall

To

Industrial Design Centre



Route

**Walk South East**  
towards Bus Stop near Shailesh J Mehta School of Management

**10:27am**  
Board **Bus 2A**

**10:35am**  
Reach bus stop near Shishu Vihar

**Walk South West**  
towards IDC main gate

Turn right

Turn right

**10:38am**  
Reach IDC Main Gate

facebook

Privacy Logout

Discuss this event

Post to Facebook ☒

Share

Aditi Rao

Avoid QIP hillside...just spotted a leopard chasing a dog

December 10 at 7:32pm

Kenneth Francis

Great news... I will go there right away!

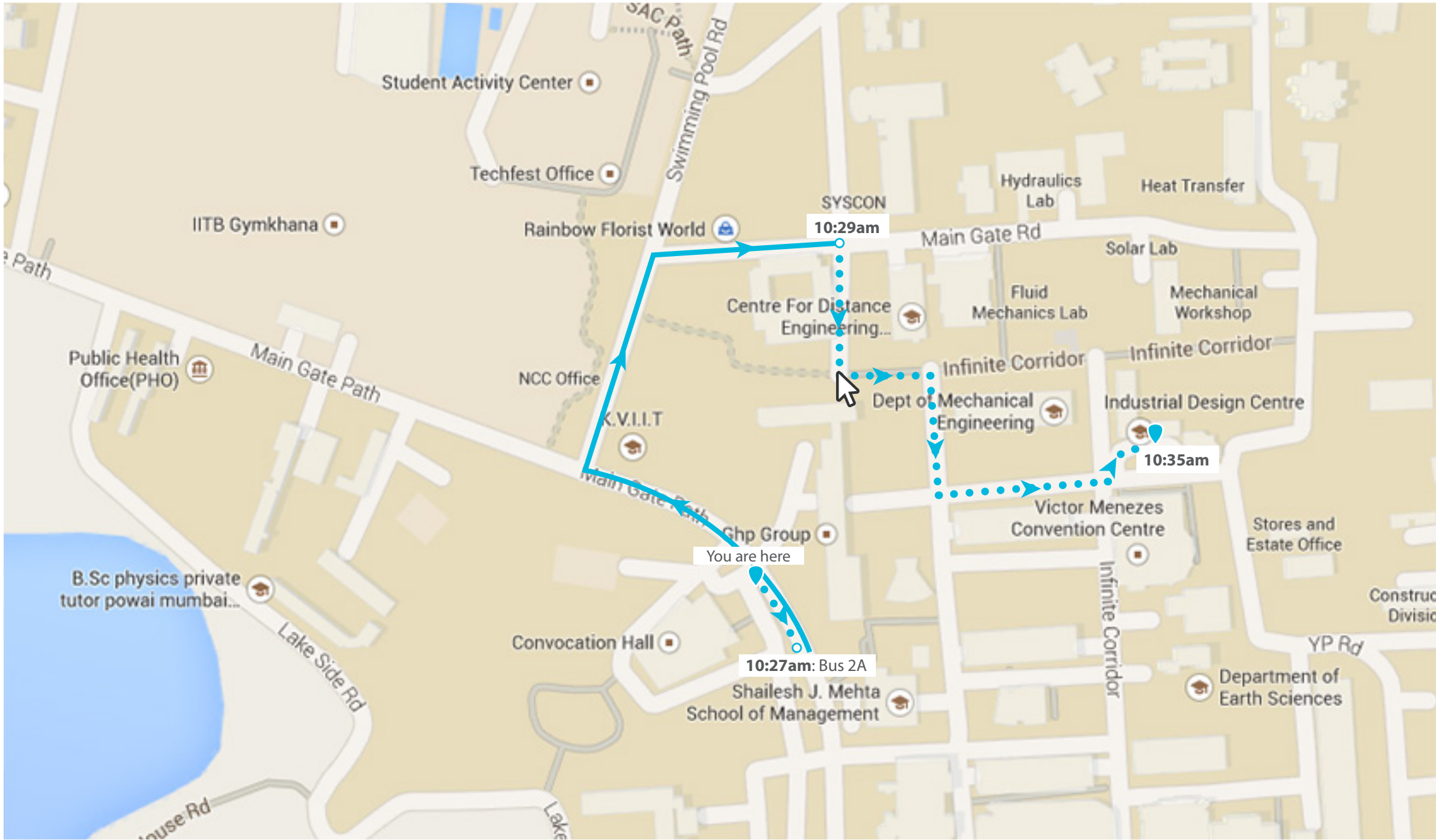
December 10 at 7:33pm





From Convocation Hall

To Industrial Design Centre



Route

**Walk South East**  
towards Bus Stop near  
Shailesh J Mehta School  
of Management

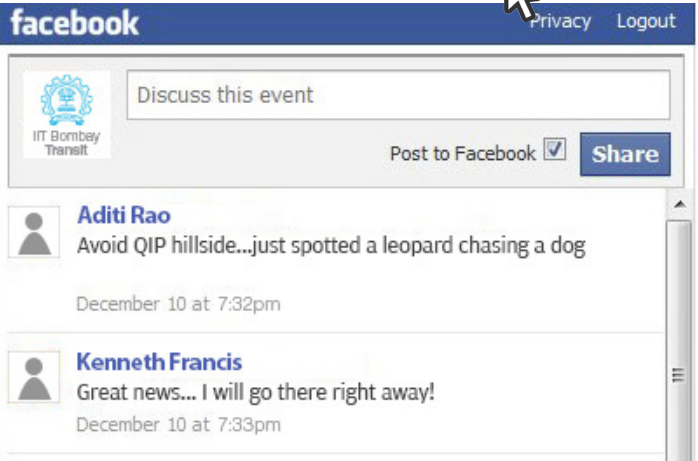
**10:27am**  
Board **Bus 2A**

**10:29am**  
Reach bus stop near SYSCON

**Walk South**  
towards Infinite Corridor

Turn left

Turn right



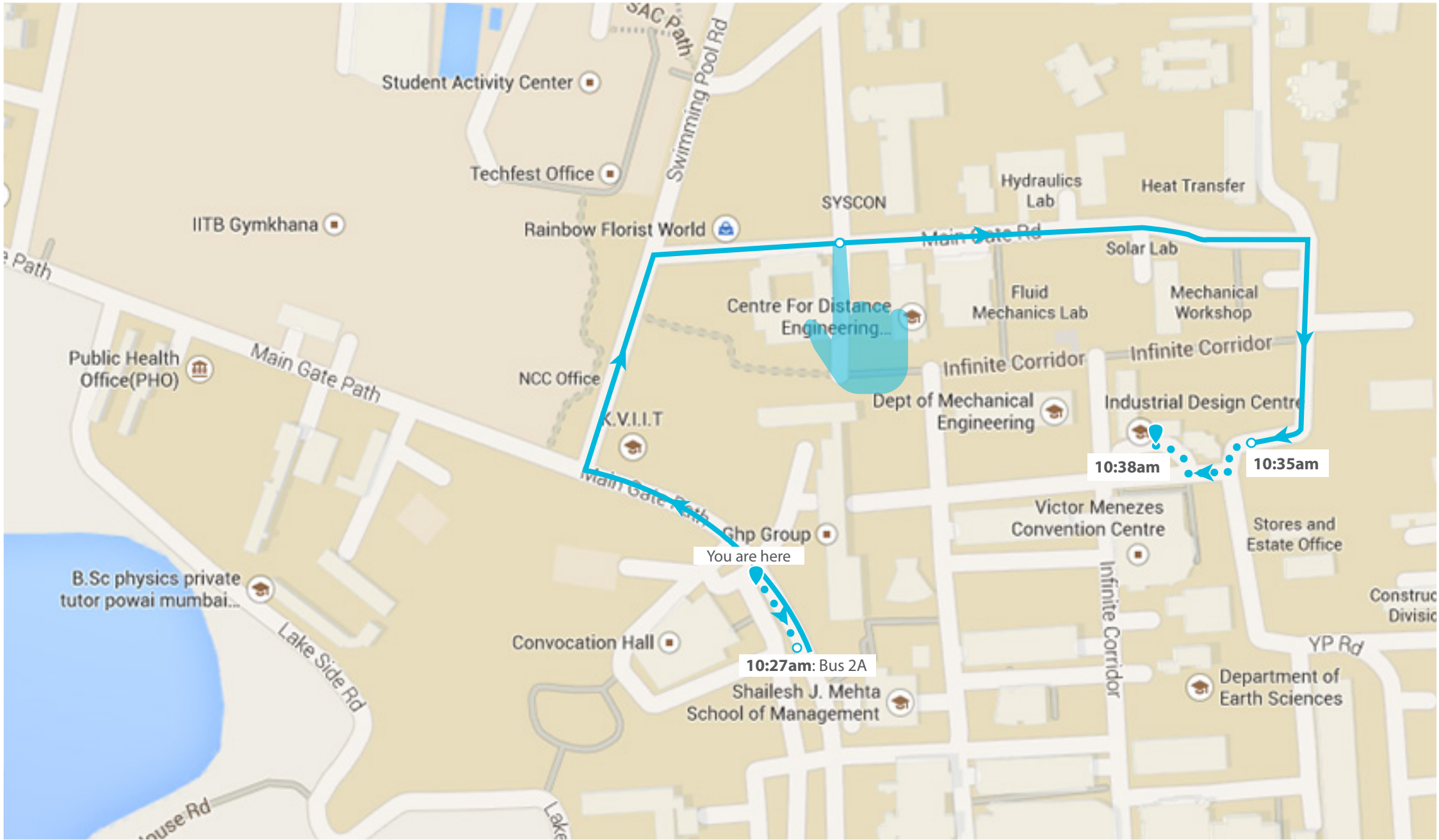


From

Convocation Hall

To

Industrial Design Centre



Route

**Walk South East**  
towards Bus Stop near Shailesh J Mehta School of Management

**10:27am**  
Board **Bus 2A**

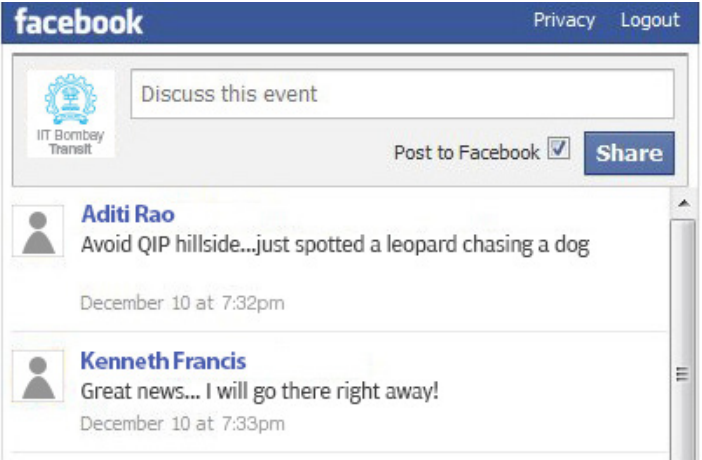
**10:35am**  
Reach bus stop near Shishu Vihar

**Walk South West**  
towards IDC main gate

Turn right

Turn right

**10:38am**  
Reach IDC Main Gate







18°C

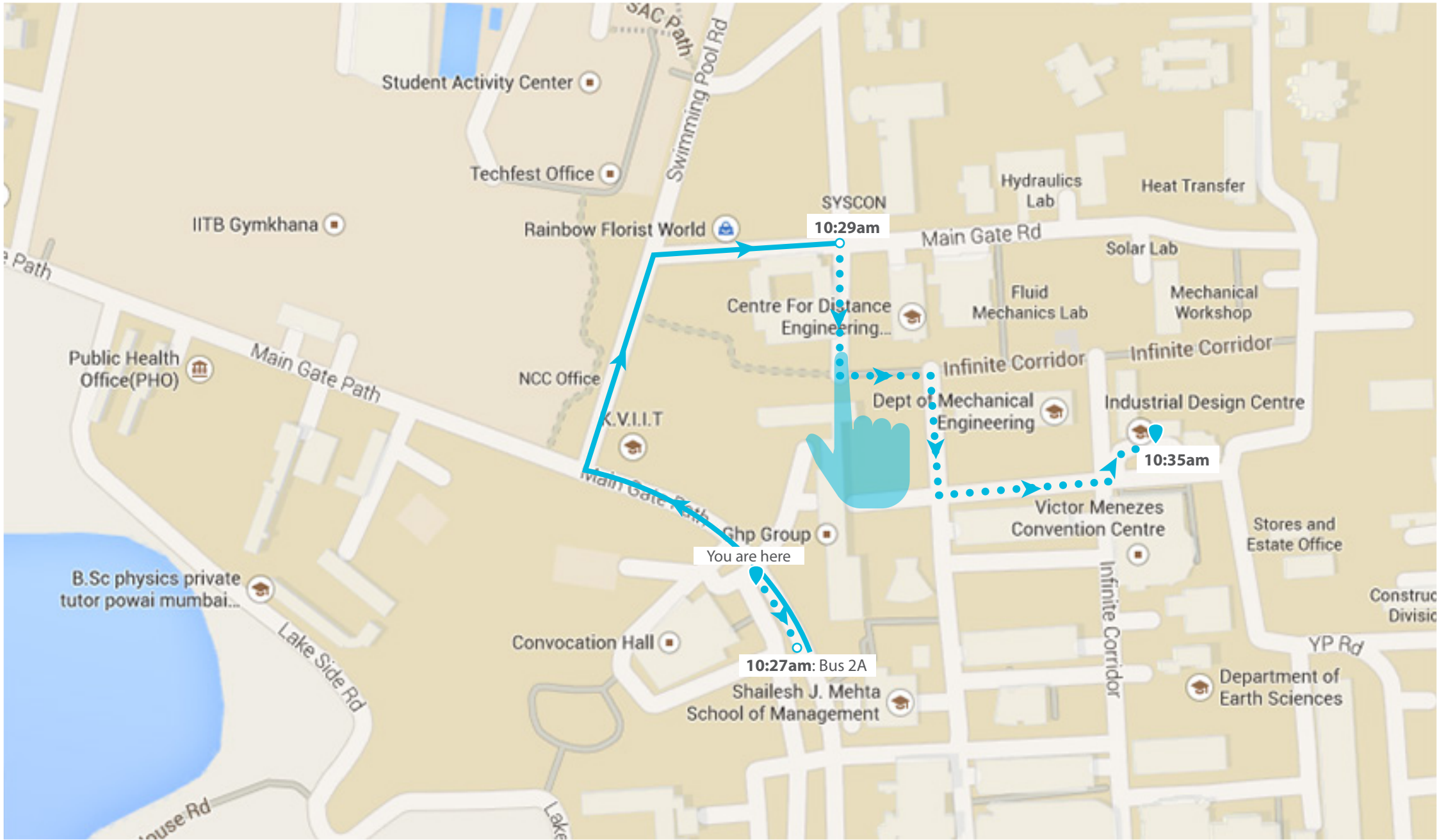
15°C

From

Convocation Hall

To

Industrial Design Centre



Route

**Walk South East**  
towards Bus Stop near  
Shailesh J Mehta School  
of Management

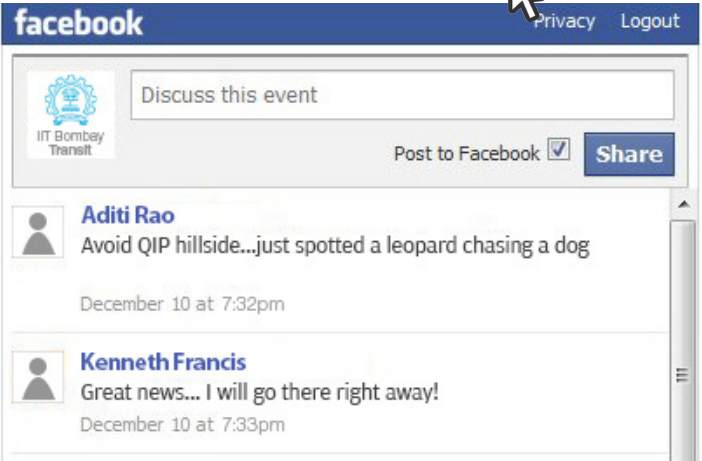
**10:27am**  
Board **Bus 2A**

**10:29am**  
Reach bus stop near SYSCON

**Walk South**  
towards Infinite Corridor

Turn left

Turn right

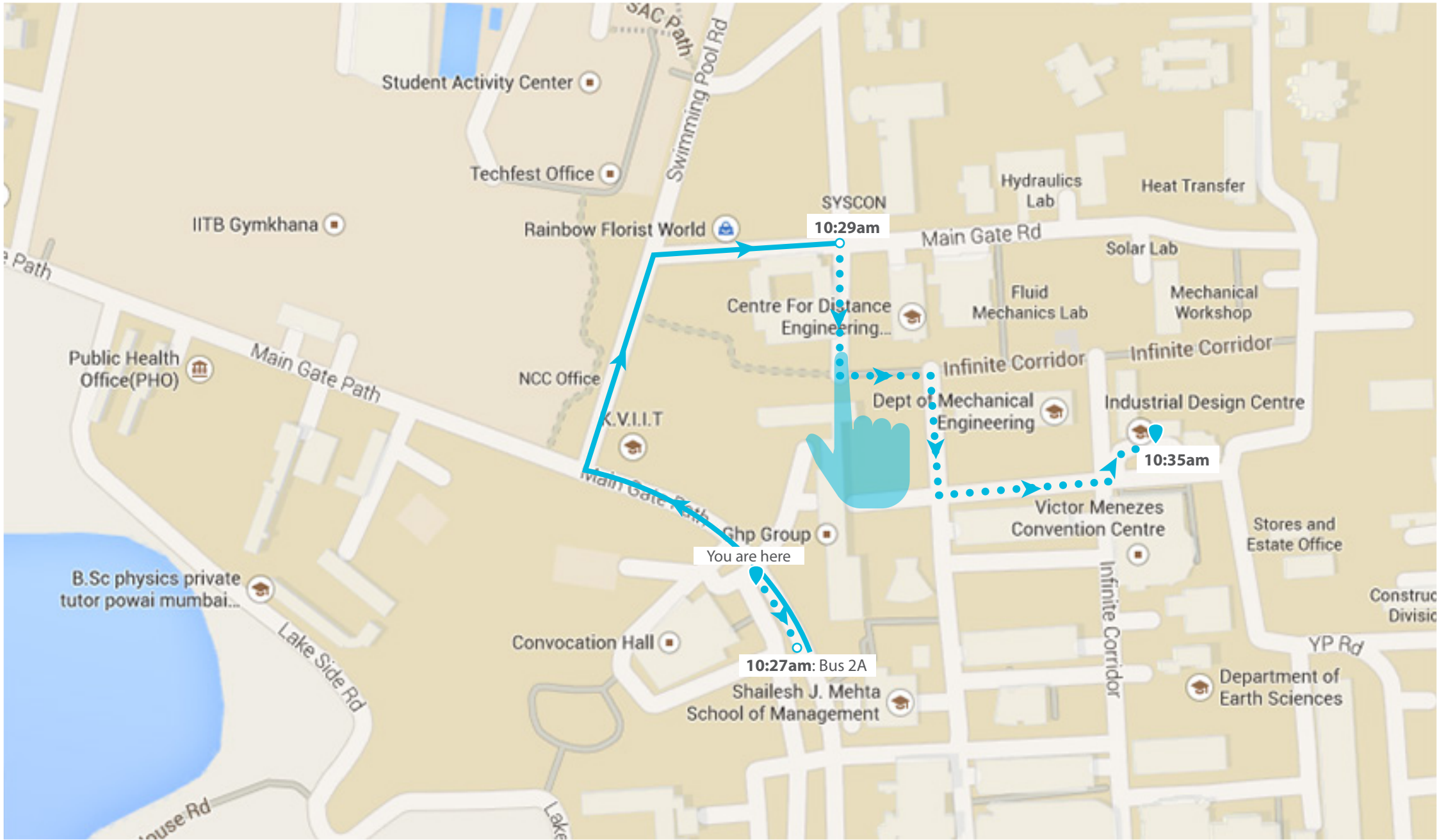






From

To



Route

- 10:27am  
Board **Bus 2A**
- 10:29am  
Reach bus stop near SYSCON
- Walk South  
towards Infinite Corridor
- Turn left
- Turn right
- Climb stairs
- Walk South
- Turn left



facebook Privacy Logout

Discuss this event

Post to Facebook ☒ Share

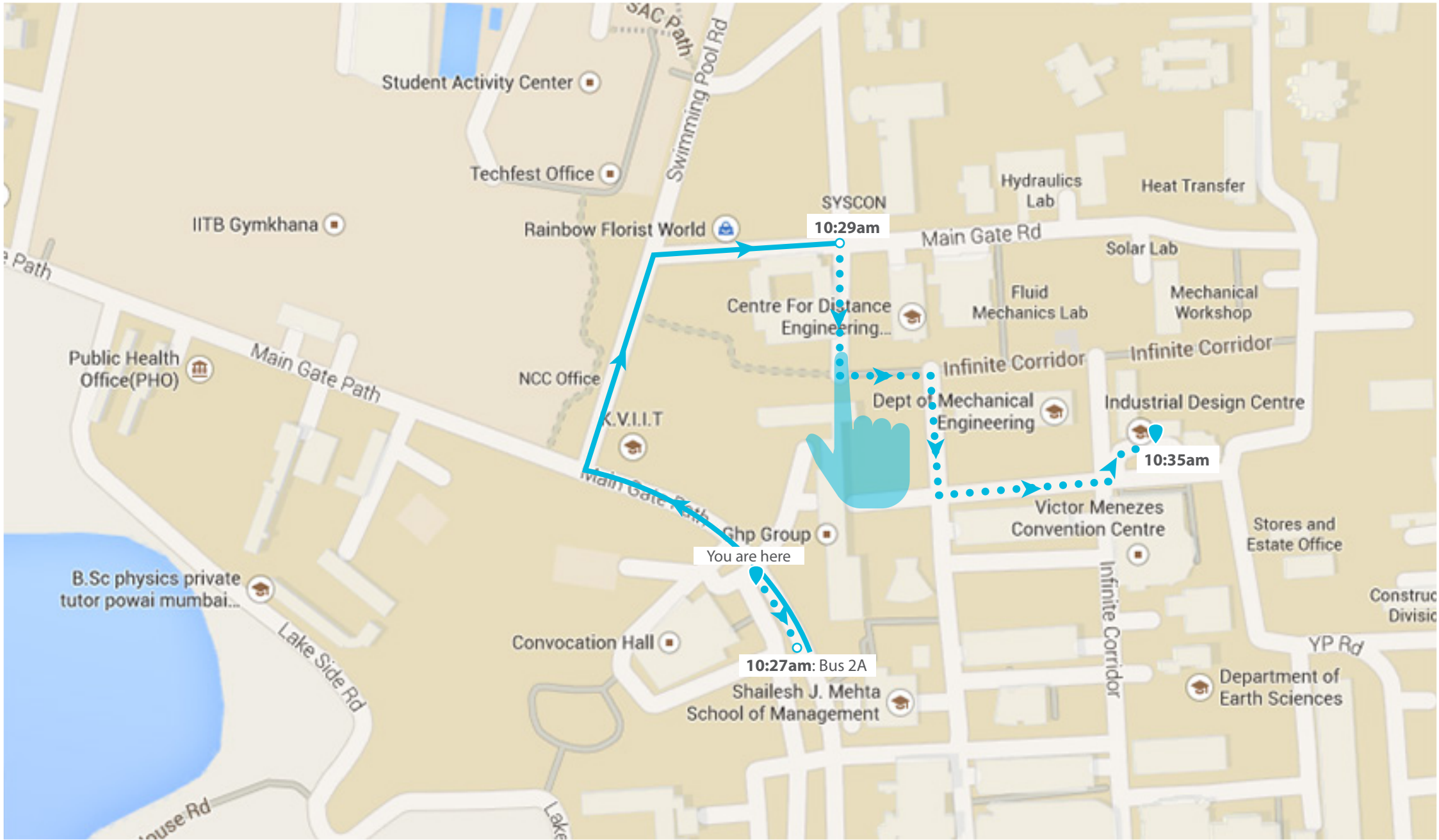
**Aditi Rao**  
Avoid QIP hillside...just spotted a leopard chasing a dog  
December 10 at 7:32pm

**Kenneth Francis**  
Great news... I will go there right away!  
December 10 at 7:33pm



From

To



Route

- Walk South towards Infinite Corridor
  - Turn left
  - Turn right
  - Climb stairs
  - Walk South
  - Turn left
  - Walk East
  - Turn left
- 10.35am**  
Reach IDC Main Entrance



facebook Privacy Logout

Discuss this event

Post to Facebook ☒ Share

**Aditi Rao**  
Avoid QIP hillside...just spotted a leopard chasing a dog  
December 10 at 7:32pm

**Kenneth Francis**  
Great news... I will go there right away!  
December 10 at 7:33pm

## **Scenario 3**

**Input by user :** Type

**Output to user :** Default route


### **Assumptions:**

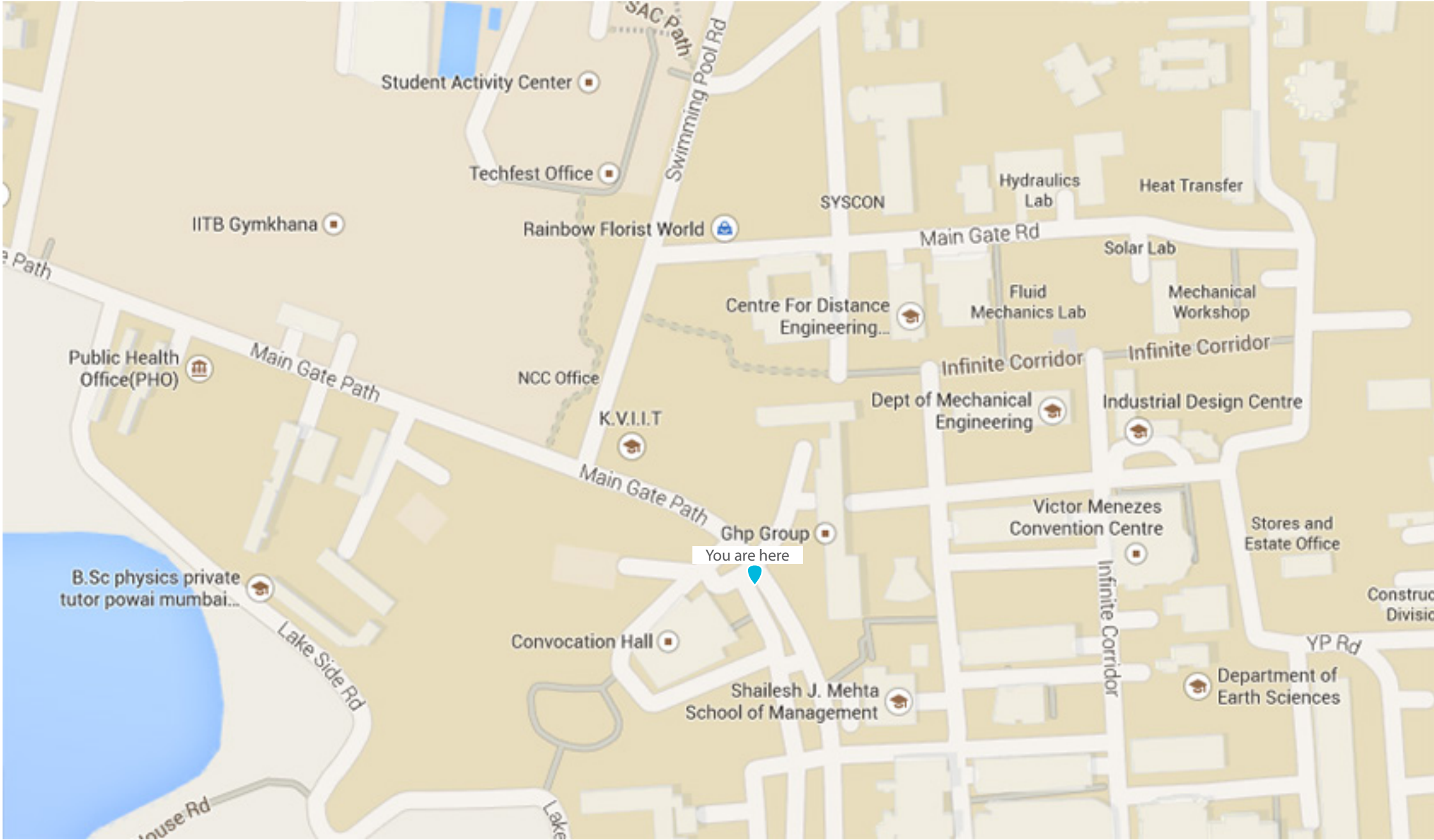
- i) Device locates user's position from GPS co-ordinates.
- ii) Absence of touchscreen input.







From

To  




**facebook** Privacy Logout



 **Aditi Rao**

Avoid QIP hillside...just spotted a leopard chasing a dog

December 10 at 7:32pm

 **Kenneth Francis**

Great news... I will go there right away!

December 10 at 7:33pm

Post to Facebook ☒

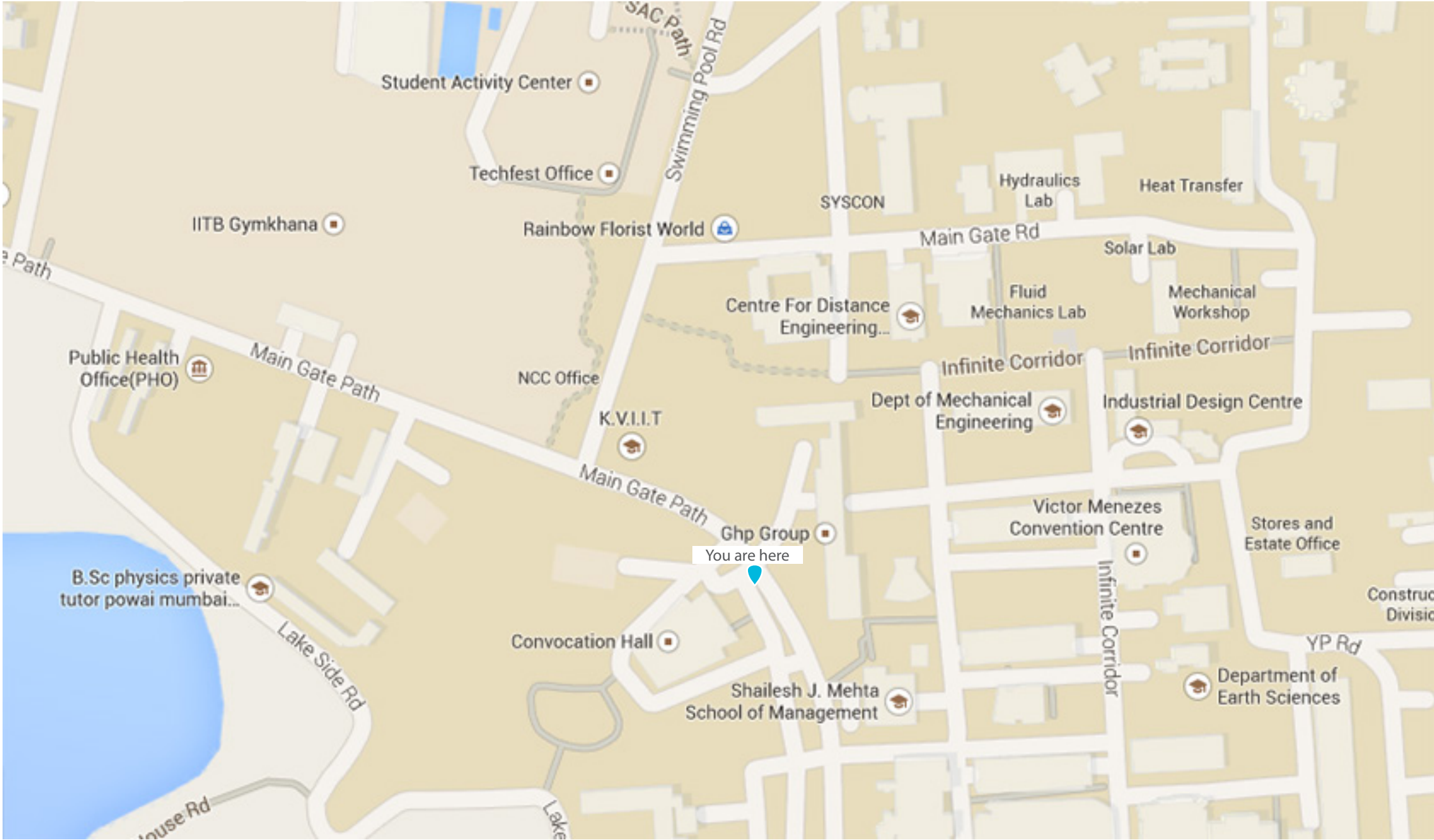
**Share**



From

Convocation Hall

To



facebook

Privacy Logout

Discuss this event

Post to Facebook ☒

Share

Aditi Rao

Avoid QIP hillside...just spotted a leopard chasing a dog

December 10 at 7:32pm

Kenneth Francis

Great news... I will go there right away!

December 10 at 7:33pm



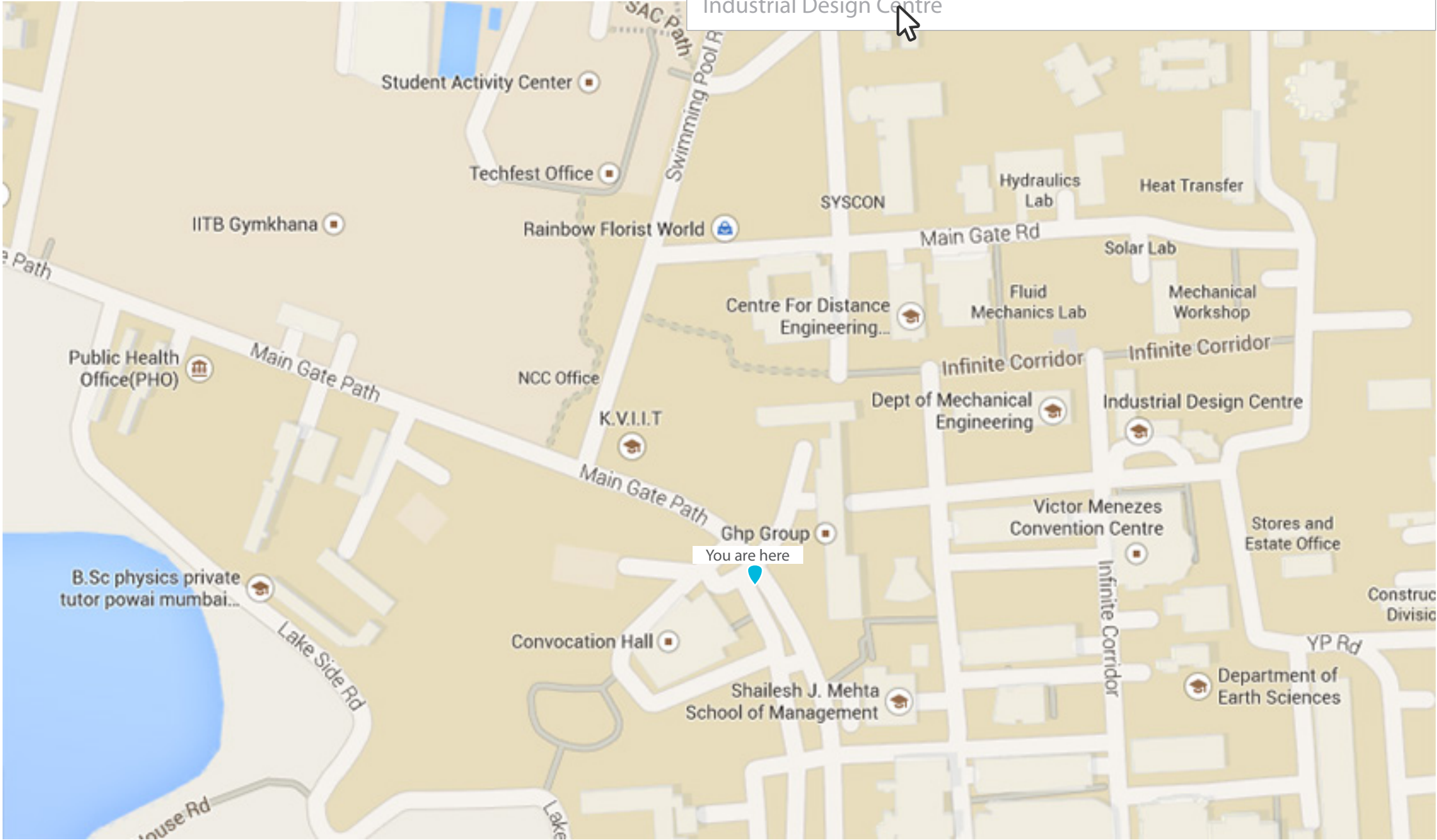


From Convocation Hall

To Industrial Des



Industrial Design Centre



Discuss this event

Post to Facebook ☒

Share



**Aditi Rao**

Avoid QIP hillside...just spotted a leopard chasing a dog

December 10 at 7:32pm



**Kenneth Francis**

Great news... I will go there right away!

December 10 at 7:33pm



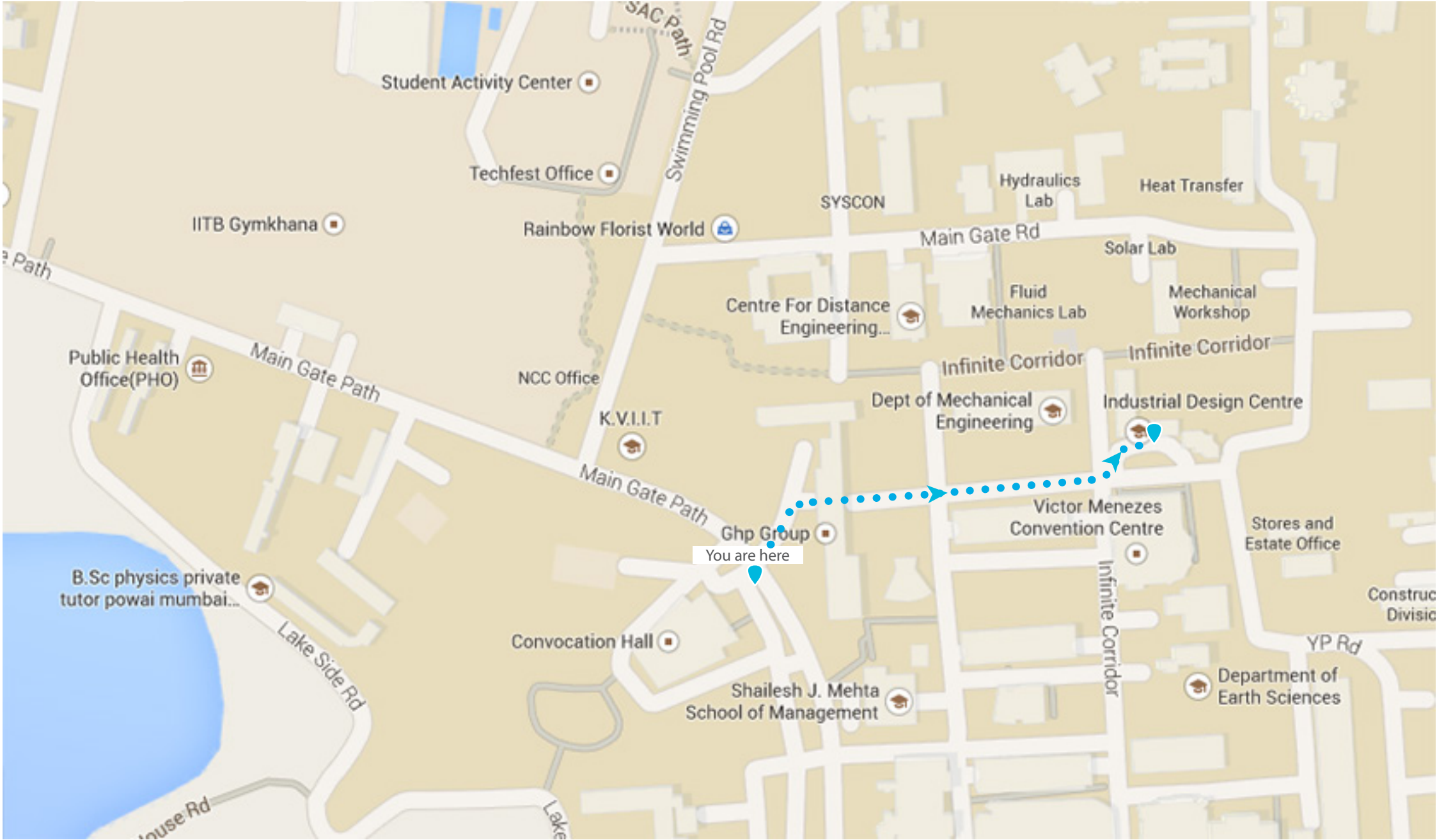


From

Convocation Hall

To

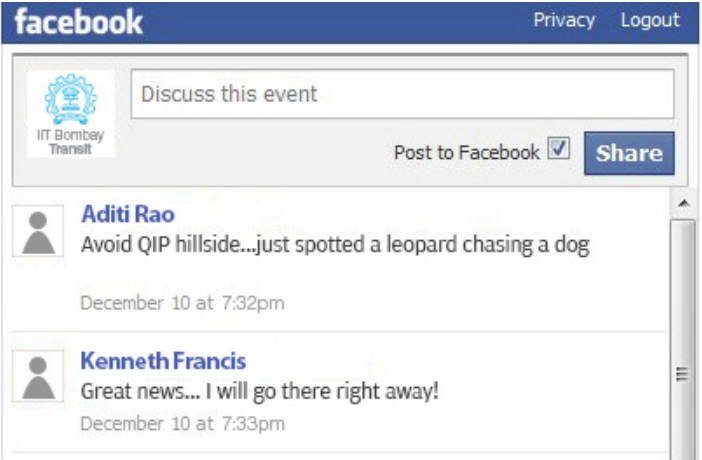
Industrial Design Centre



Route

Shortest mode of travel: **Walk**

**10:25am**  
Reach Industrial Design Centre



## **Scenario 4**

**Input by user :** Click

**Output to user :** Default route

### **Assumptions:**

- i) Device locates user's position from GPS co-ordinates.
- ii) Absence of touchscreen input.

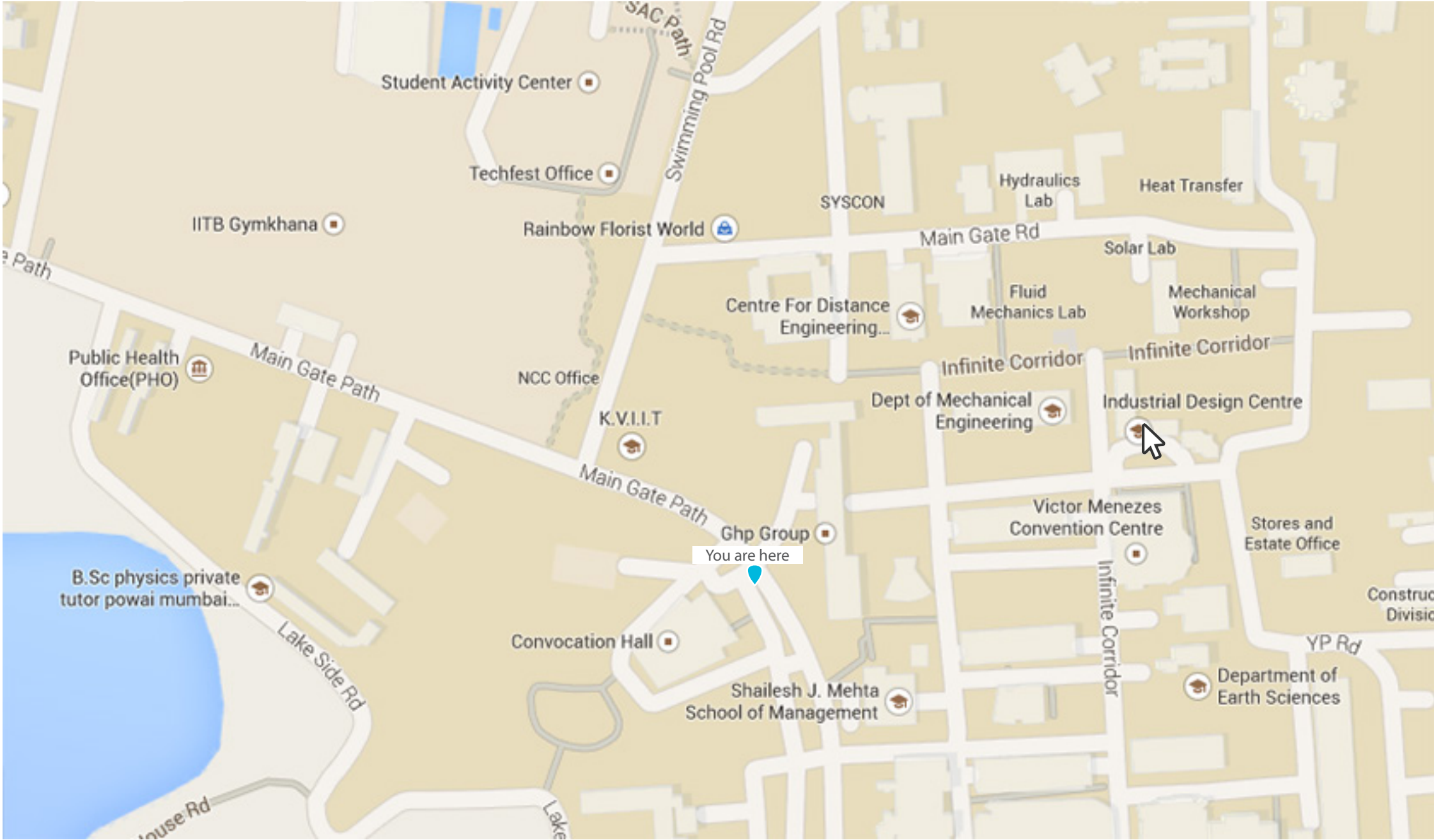


From

Convocation Hall

To

Type destination here or click on the map



facebook

Privacy Logout

Discuss this event

Post to Facebook ☒

Share

Aditi Rao

Avoid QIP hillside...just spotted a leopard chasing a dog

December 10 at 7:32pm

Kenneth Francis

Great news... I will go there right away!

December 10 at 7:33pm



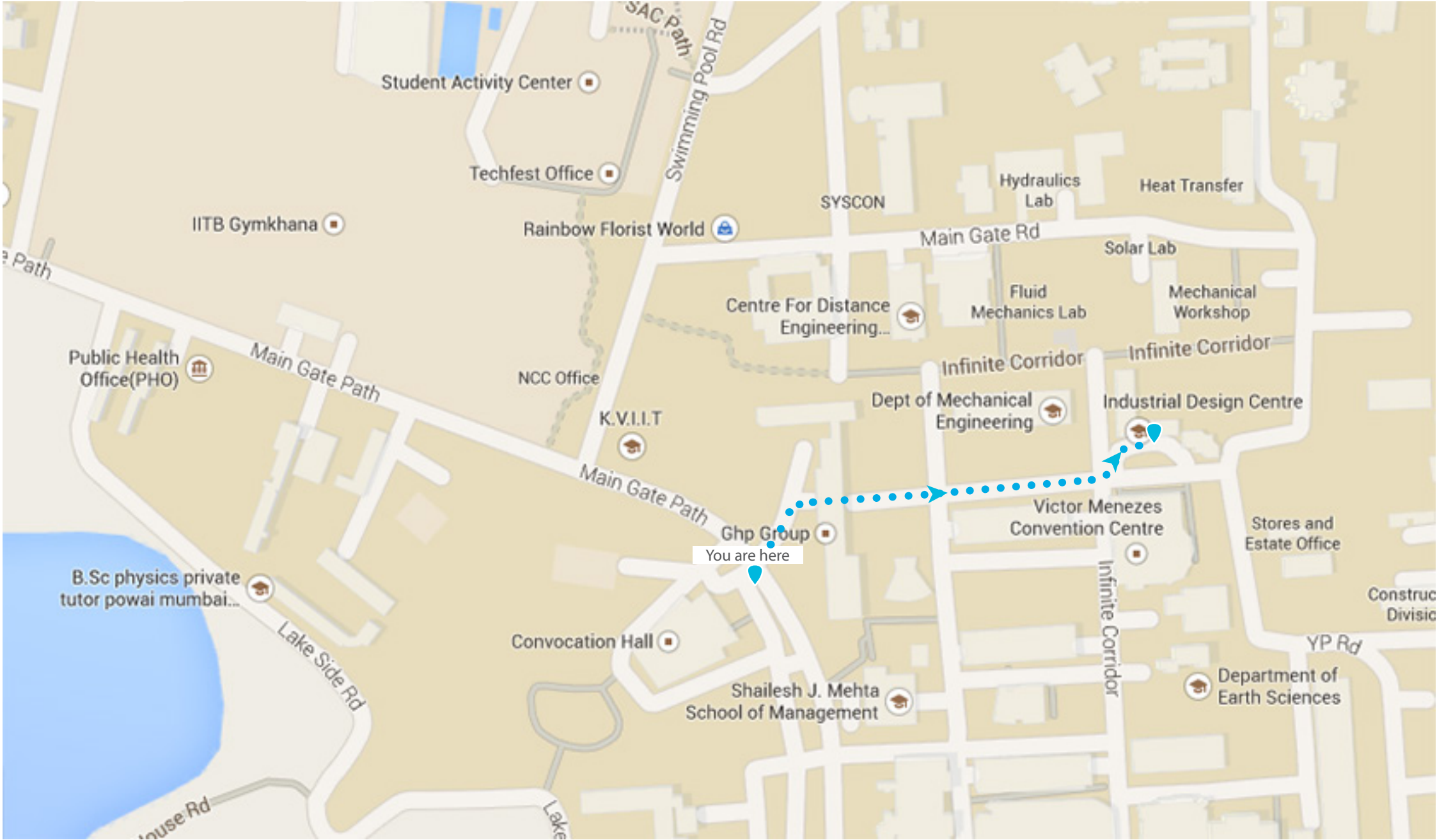


From

Convocation Hall

To

Industrial Design Centre



Route

Shortest mode of travel: **Walk**

**10:25am**  
Reach Industrial Design Centre

facebook

Privacy Logout

Discuss this event

Post to Facebook ☒

Share

Aditi Rao

Avoid QIP hillside...just spotted a leopard chasing a dog

December 10 at 7:32pm

Kenneth Francis

Great news... I will go there right away!

December 10 at 7:33pm

## **Scenario 5**

**Input by user :** Touchscreen

**Output to user :** Default route

### **Assumptions:**

- i) Device locates user's position from GPS co-ordinates.
- ii) Presence of touchscreen input.

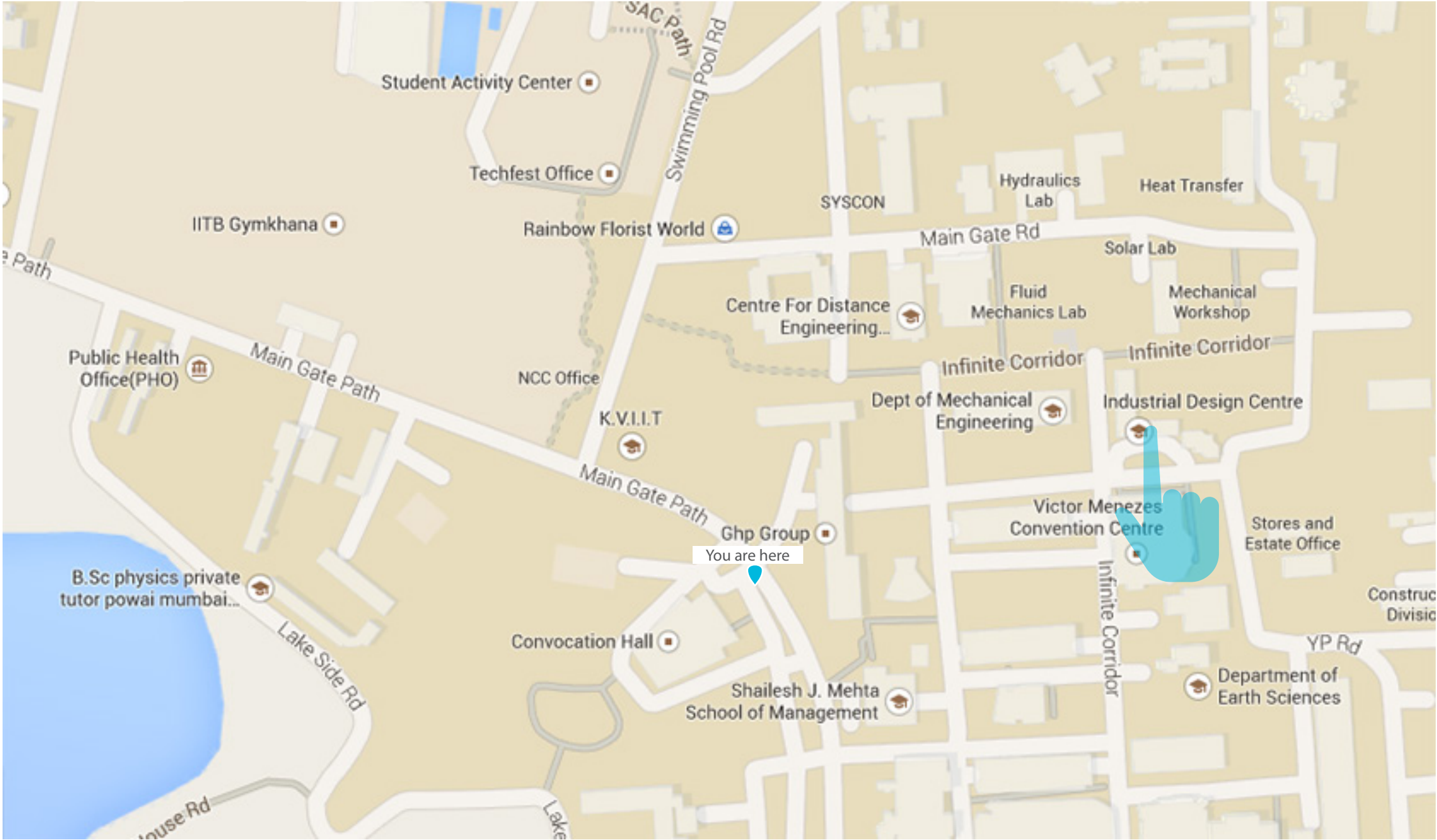


From

Convocation Hall

To

Type destination here or click on the map



facebook

Privacy Logout

Discuss this event

Post to Facebook ☒

Share

Aditi Rao

Avoid QIP hillside...just spotted a leopard chasing a dog

December 10 at 7:32pm

Kenneth Francis

Great news... I will go there right away!

December 10 at 7:33pm



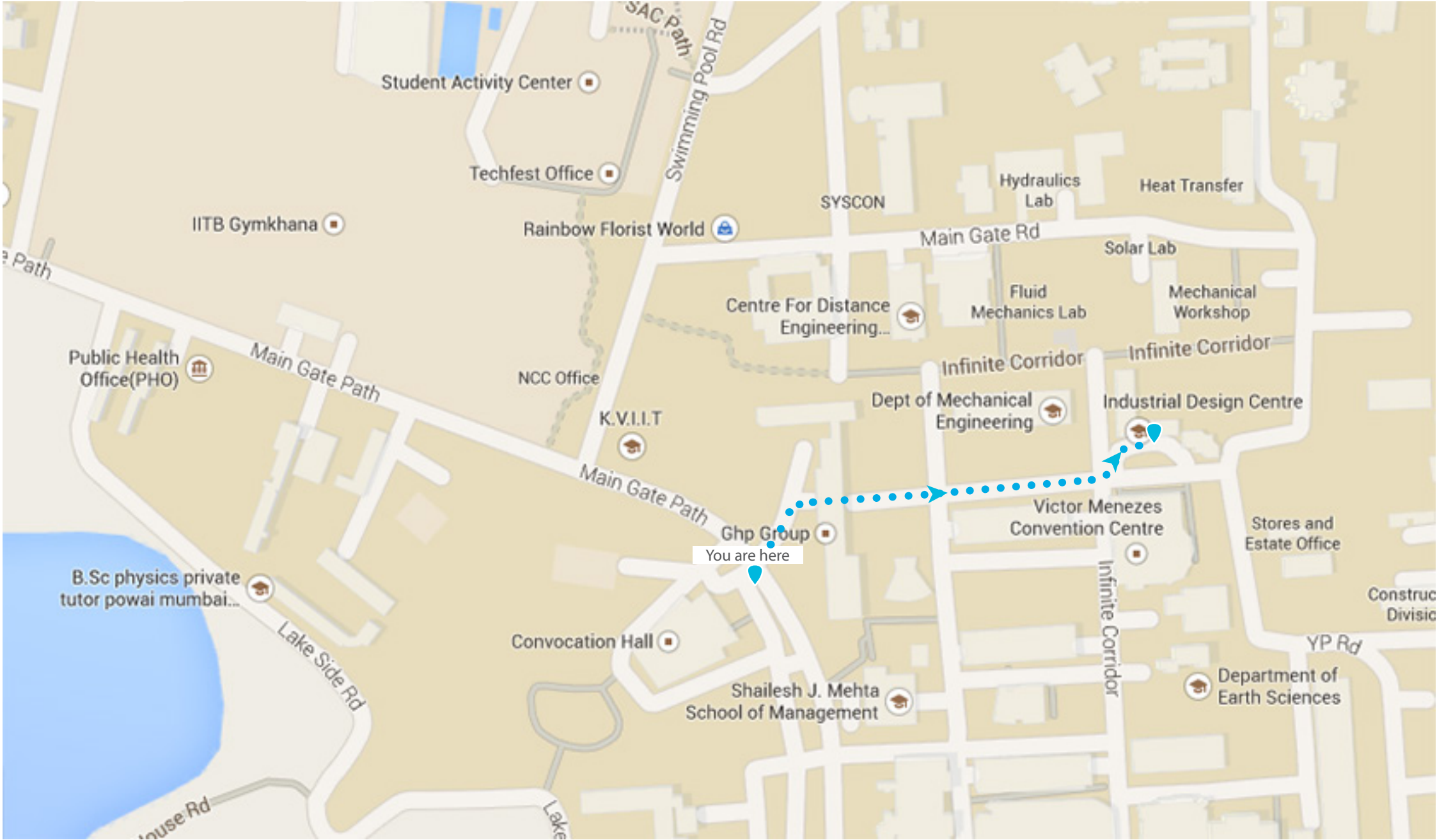


From

Convocation Hall

To

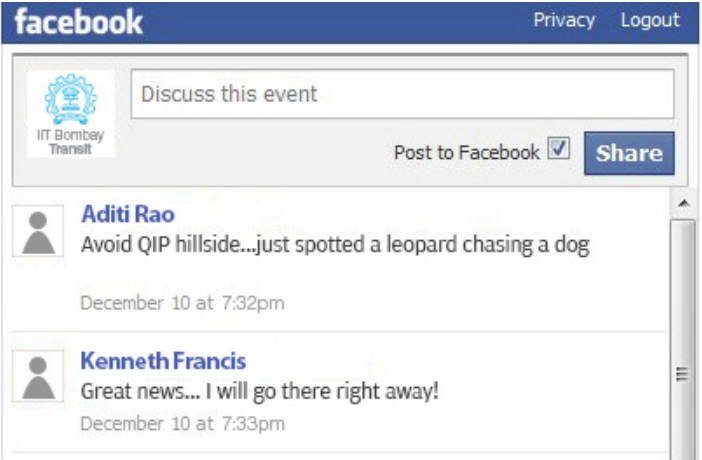
Industrial Design Centre



Route

Shortest mode of travel: **Walk**

**10:25am**  
Reach Industrial Design Centre



## **Scenario 6**

**Input by user :** Touchscreen

**Output to user :** Default route

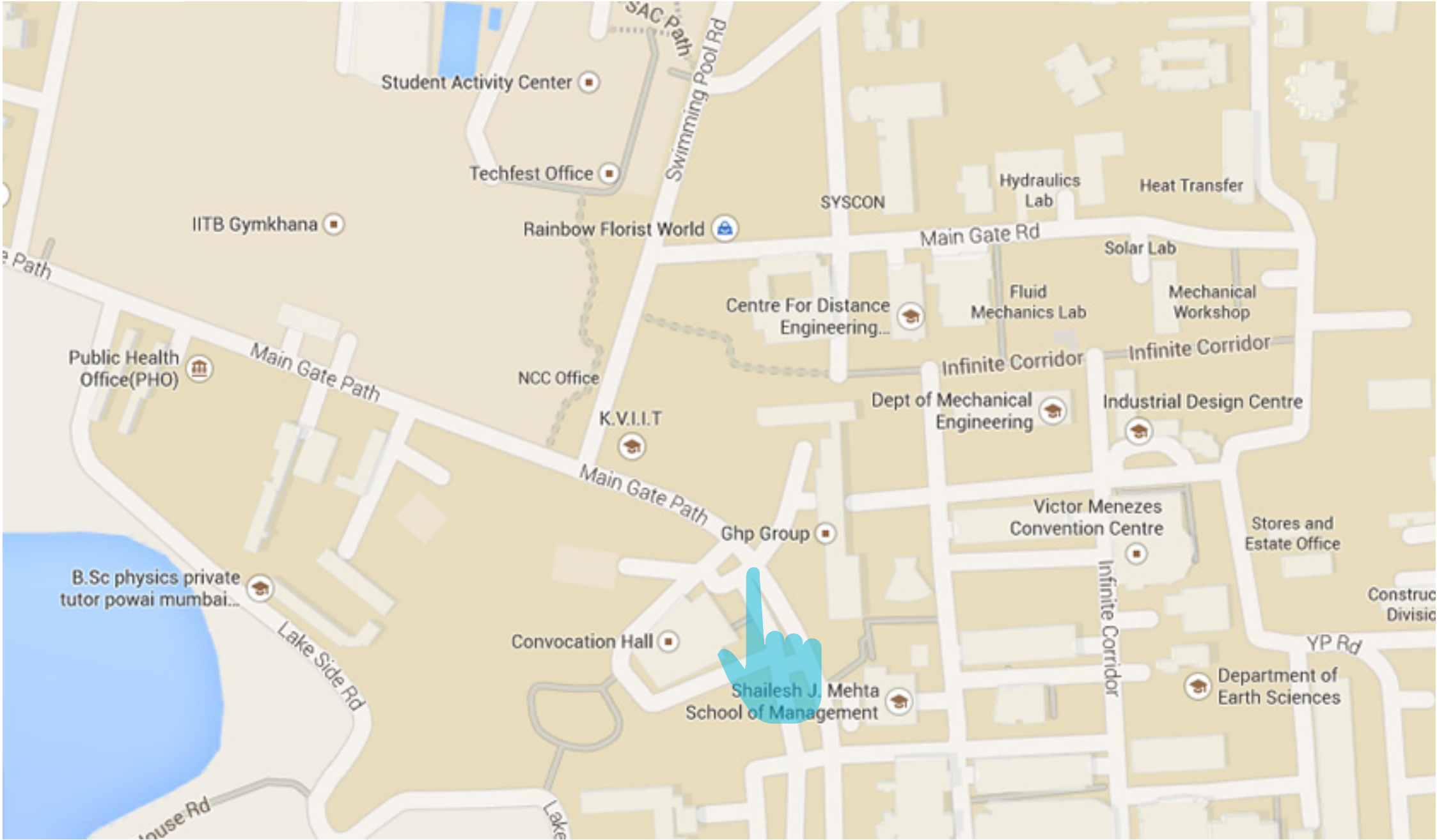
### **Assumptions:**

- i) Absence of GPS.
- ii) Presence of touchscreen input.



From

To



facebook

PrivacyLogout

Discuss this event

Post to Facebook

Share

Aditi Rao

Avoid QIP hillside...just spotted a leopard chasing a dog

December 10 at 7:32pm

Kenneth Francis

Great news... I will go there right away!

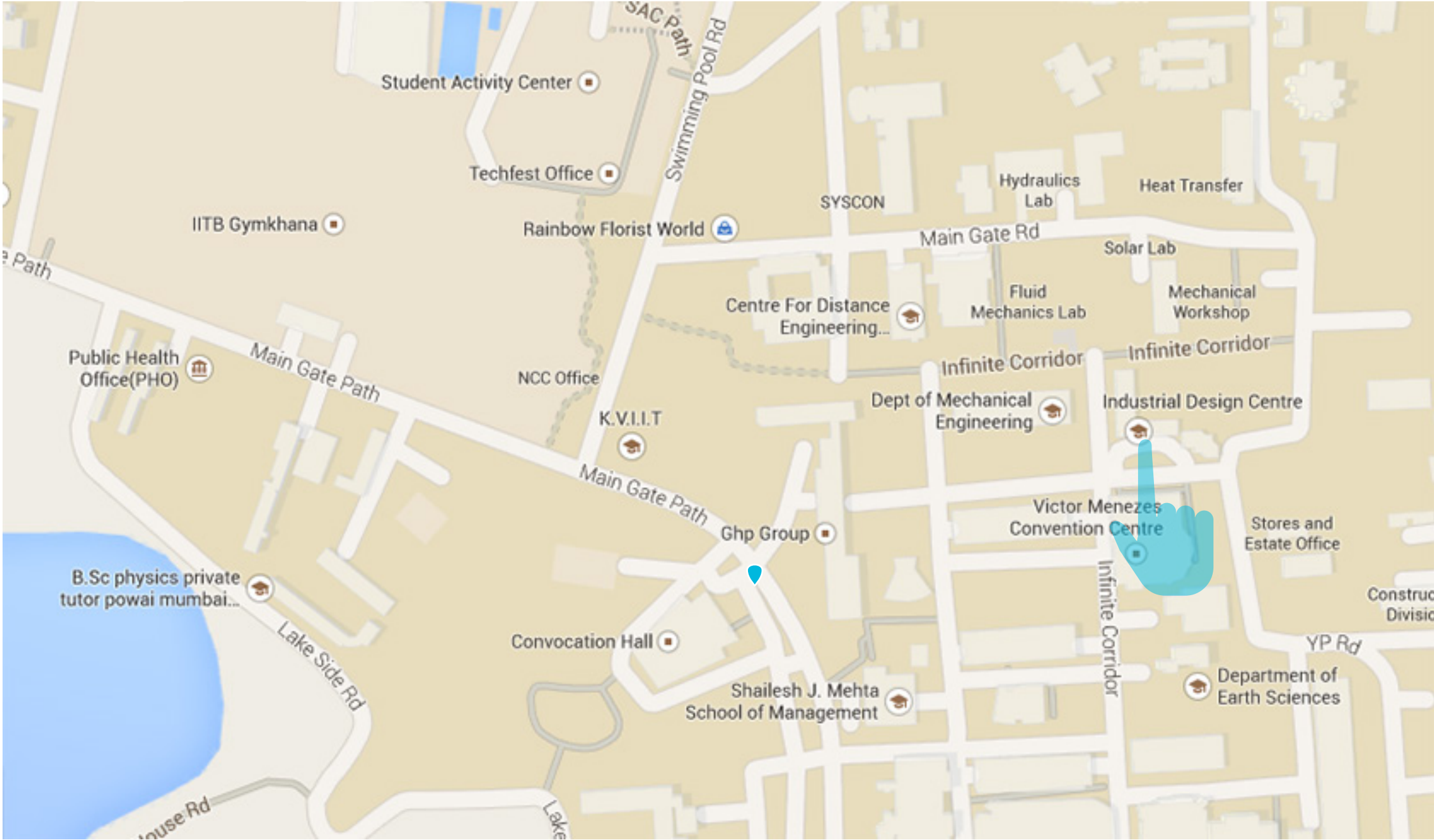
December 10 at 7:33pm





From

To



facebook

Privacy Logout

Discuss this event

Post to Facebook ☒

Share

Aditi Rao

Avoid QIP hillside...just spotted a leopard chasing a dog

December 10 at 7:32pm

Kenneth Francis

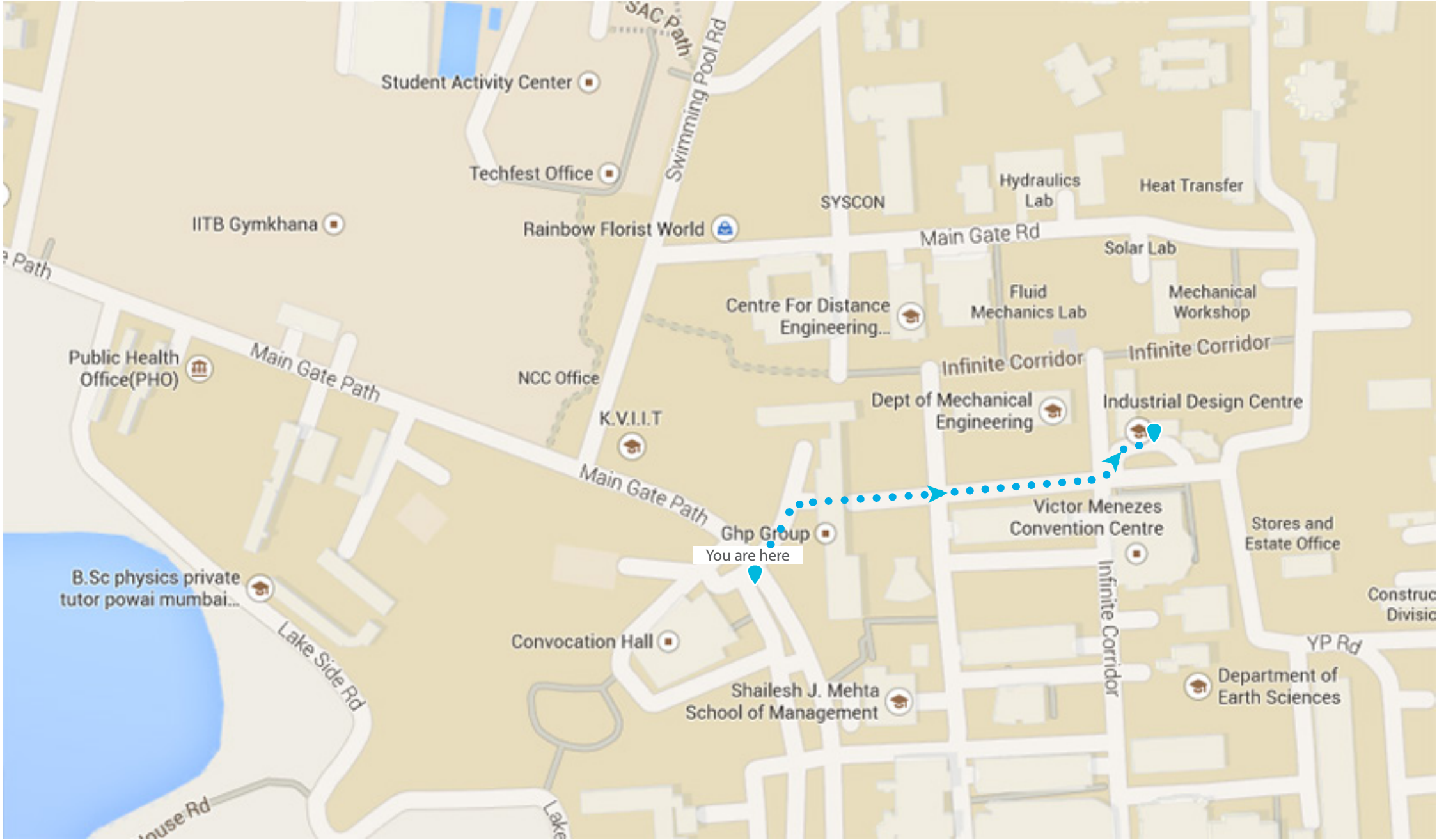
Great news... I will go there right away!

December 10 at 7:33pm



From

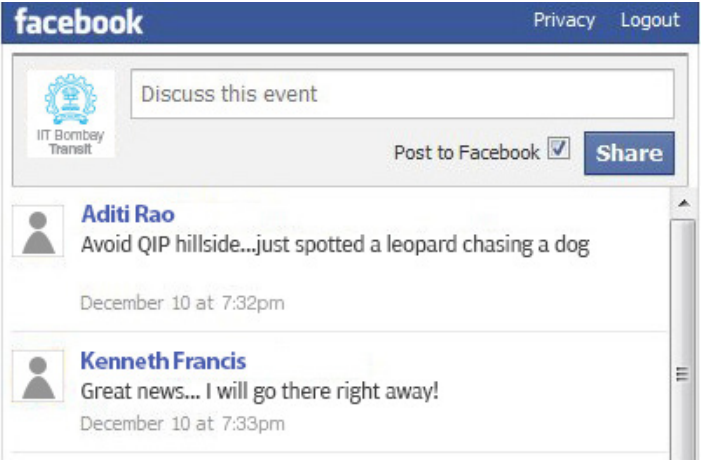
To



Route

Shortest mode of travel: **Walk**

**10:25am**  
Reach Industrial Design Centre



## **Scenario 7**

**Input by user :** Click

**Output to user :** Default route

### **Assumptions:**

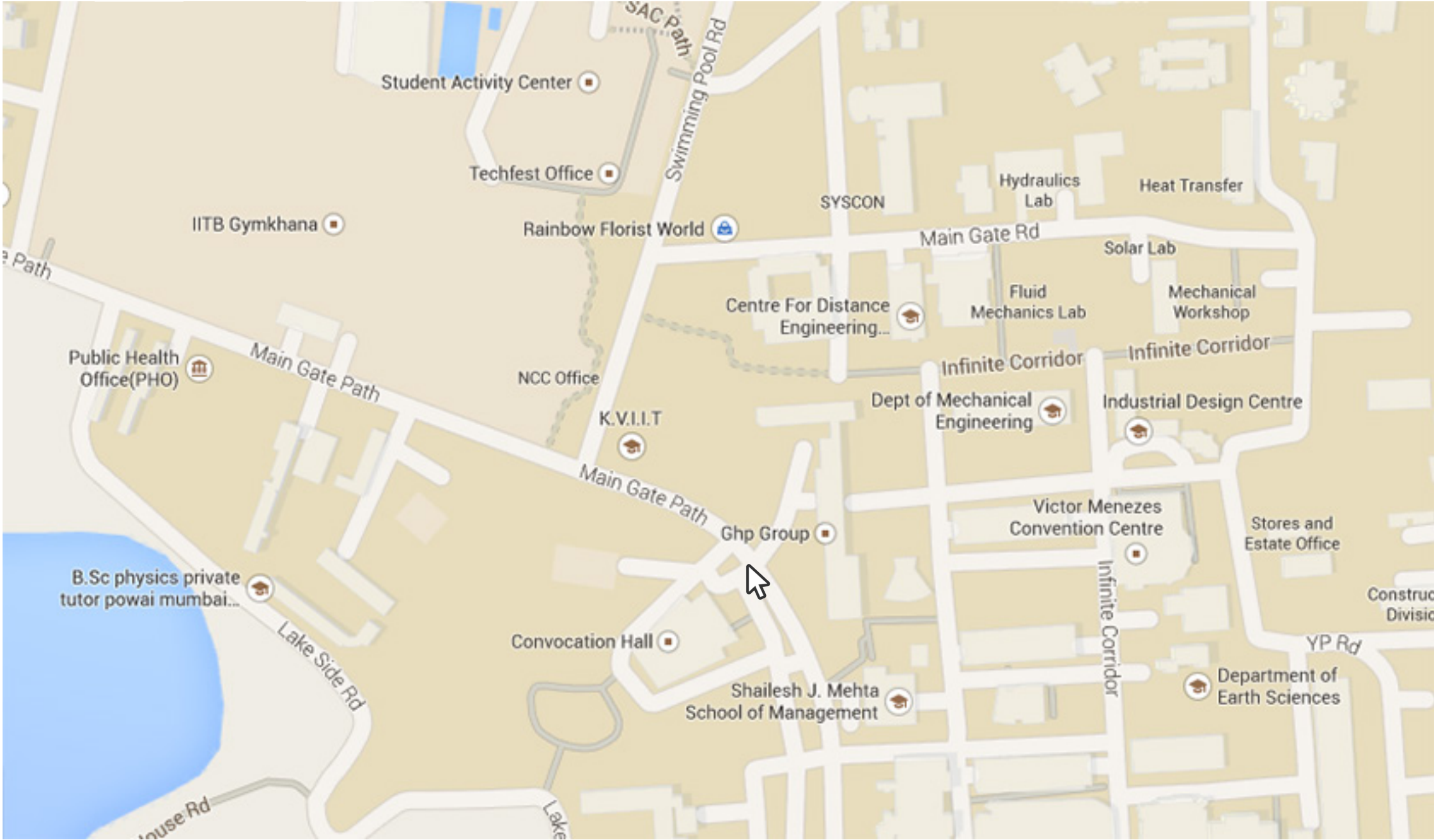
- i) Absence of GPS.
- ii) Absence of touchscreen input.





From

To



facebook

Privacy Logout

Discuss this event

Post to Facebook ☒

Share

Aditi Rao

Avoid QIP hillside...just spotted a leopard chasing a dog

December 10 at 7:32pm

Kenneth Francis

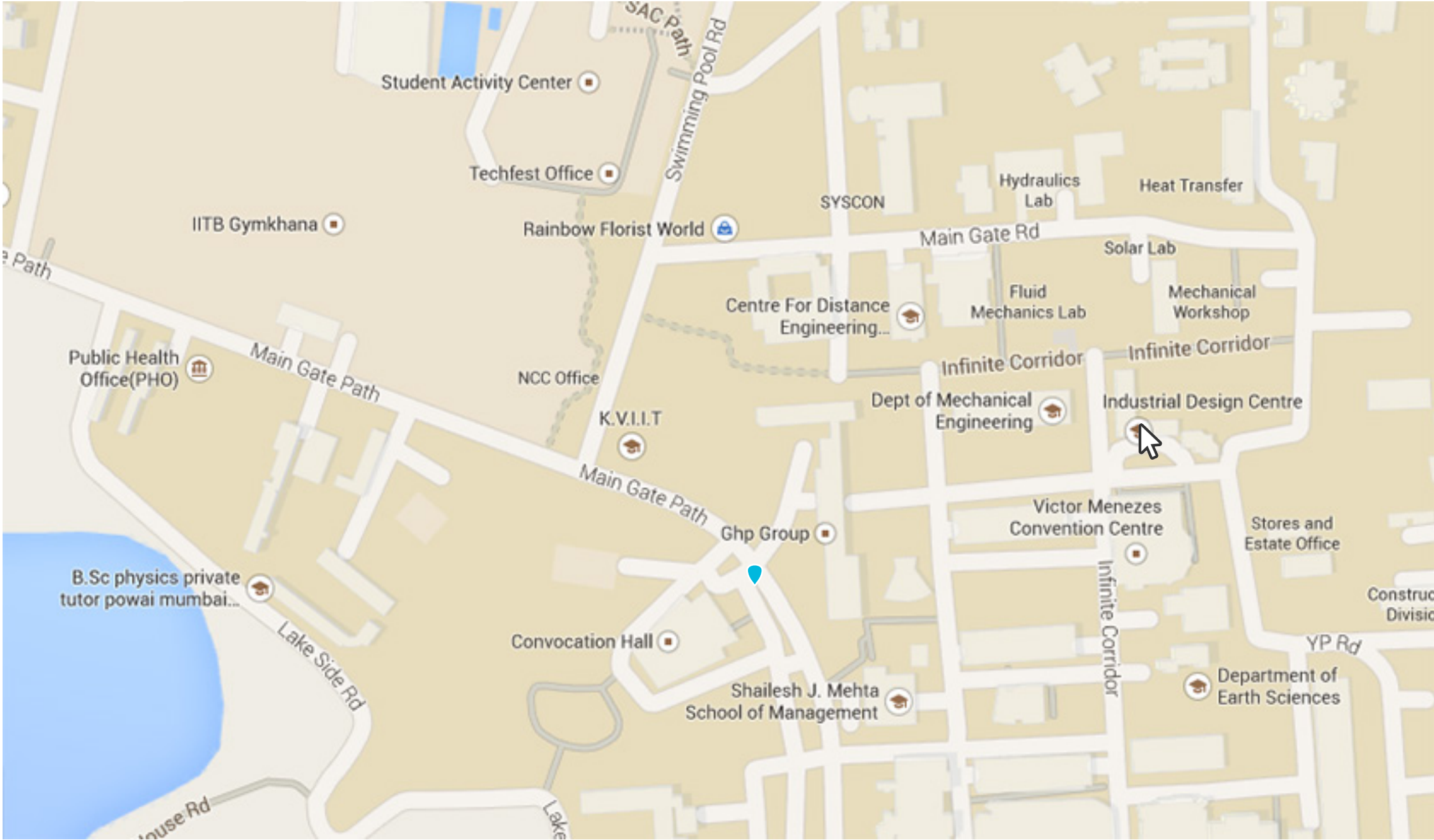
Great news... I will go there right away!

December 10 at 7:33pm



From

To



facebook

Privacy Logout

Discuss this event

Post to Facebook ☒

Share

Aditi Rao

Avoid QIP hillside...just spotted a leopard chasing a dog

December 10 at 7:32pm

Kenneth Francis

Great news... I will go there right away!

December 10 at 7:33pm



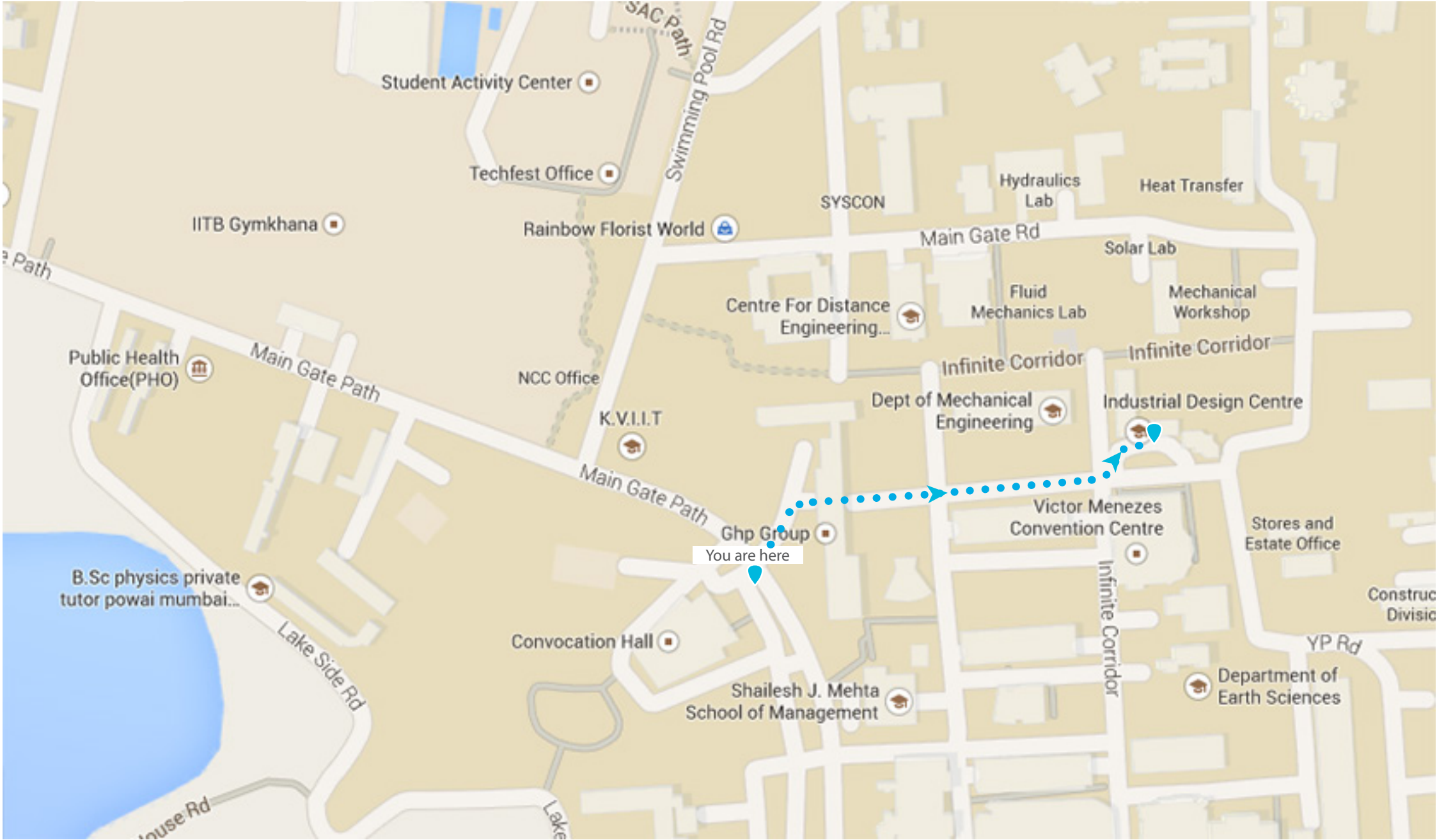


From

Convocation Hall

To

Industrial Design Centre



Route

Shortest mode of travel: **Walk**

**10:25am**  
Reach Industrial Design Centre

facebook

Privacy Logout

Discuss this event

Post to Facebook ☒

Share

Aditi Rao

Avoid QIP hillside...just spotted a leopard chasing a dog

December 10 at 7:32pm

Kenneth Francis

Great news... I will go there right away!

December 10 at 7:33pm



## **Scenario 8**

**Input by user :** Type, touchscreen

**Output to user :** Default route

### **Assumptions:**

- i) Absence of GPS.
- ii) Presence of touchscreen input.



From

To



facebook

PrivacyLogout

Discuss this event

Post to Facebook

Share

Aditi Rao

Avoid QIP hillside...just spotted a leopard chasing a dog

December 10 at 7:32pm

Kenneth Francis

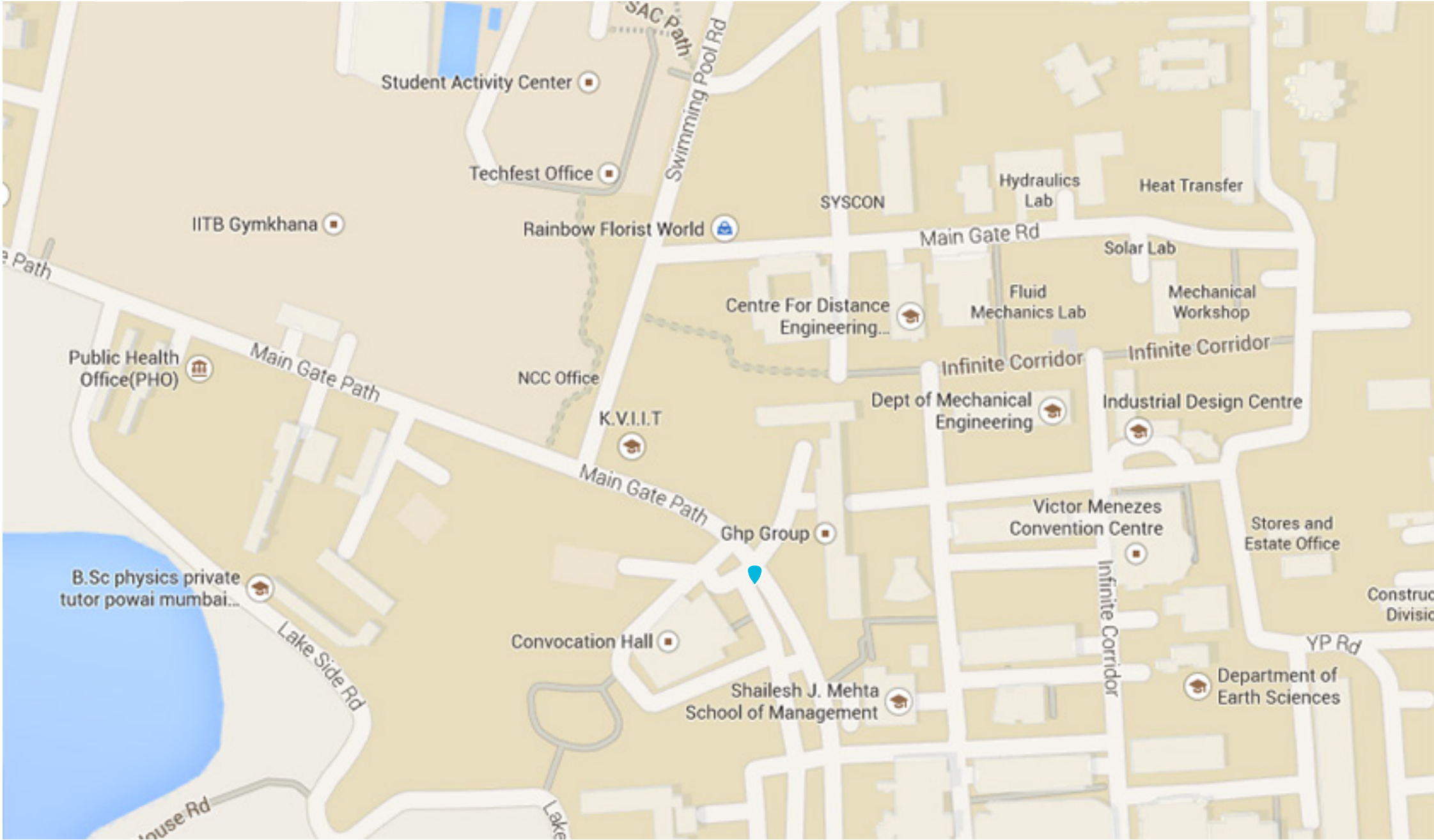
Great news... I will go there right away!

December 10 at 7:33pm



From

To



facebook

Privacy Logout

Discuss this event

Post to Facebook ☒

Share

Aditi Rao

Avoid QIP hillside...just spotted a leopard chasing a dog

December 10 at 7:32pm

Kenneth Francis

Great news... I will go there right away!

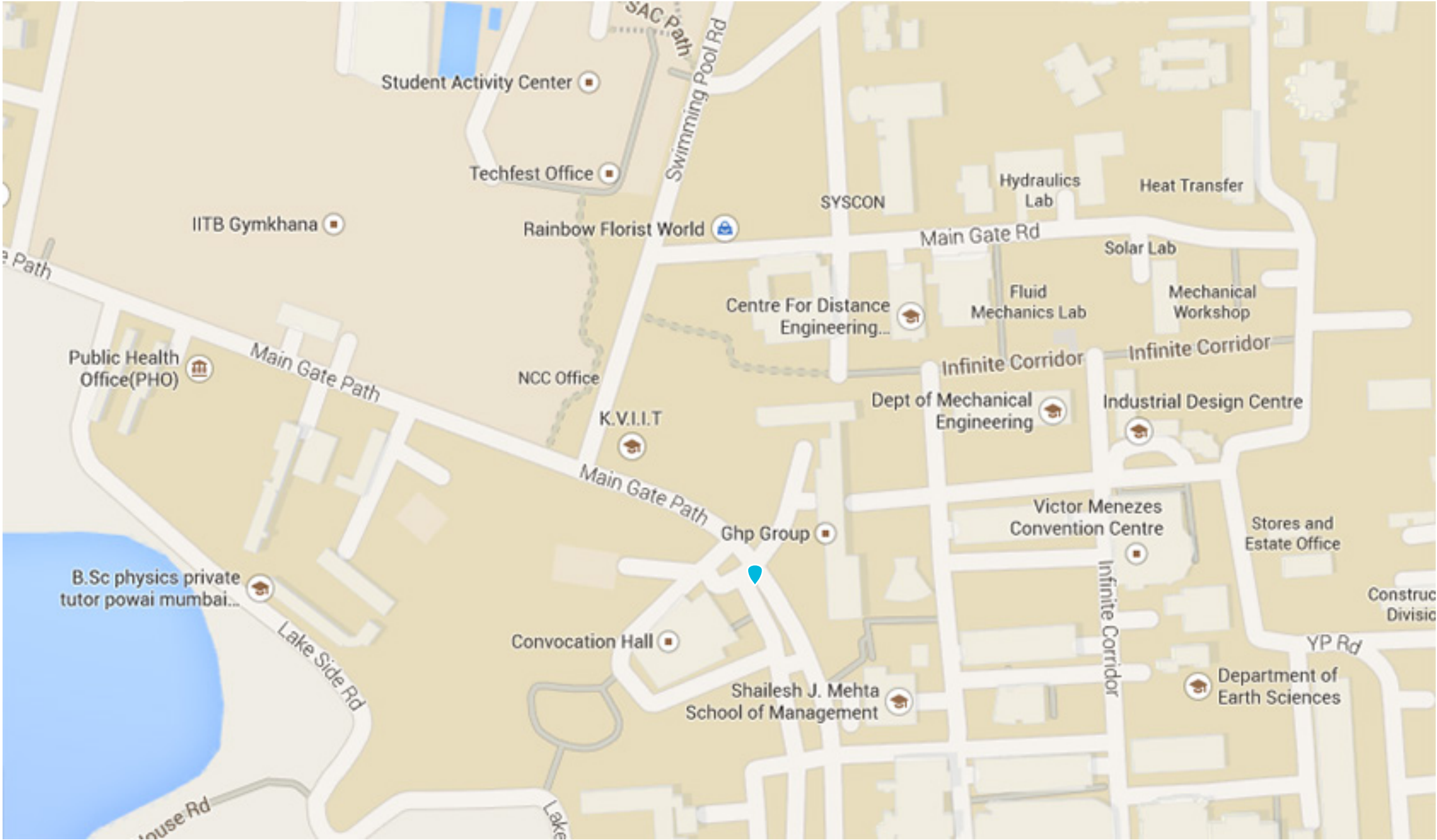
December 10 at 7:33pm





From

To



facebook

Privacy Logout

Discuss this event

Post to Facebook ☒

Share

Aditi Rao

Avoid QIP hillside...just spotted a leopard chasing a dog

December 10 at 7:32pm

Kenneth Francis

Great news... I will go there right away!

December 10 at 7:33pm



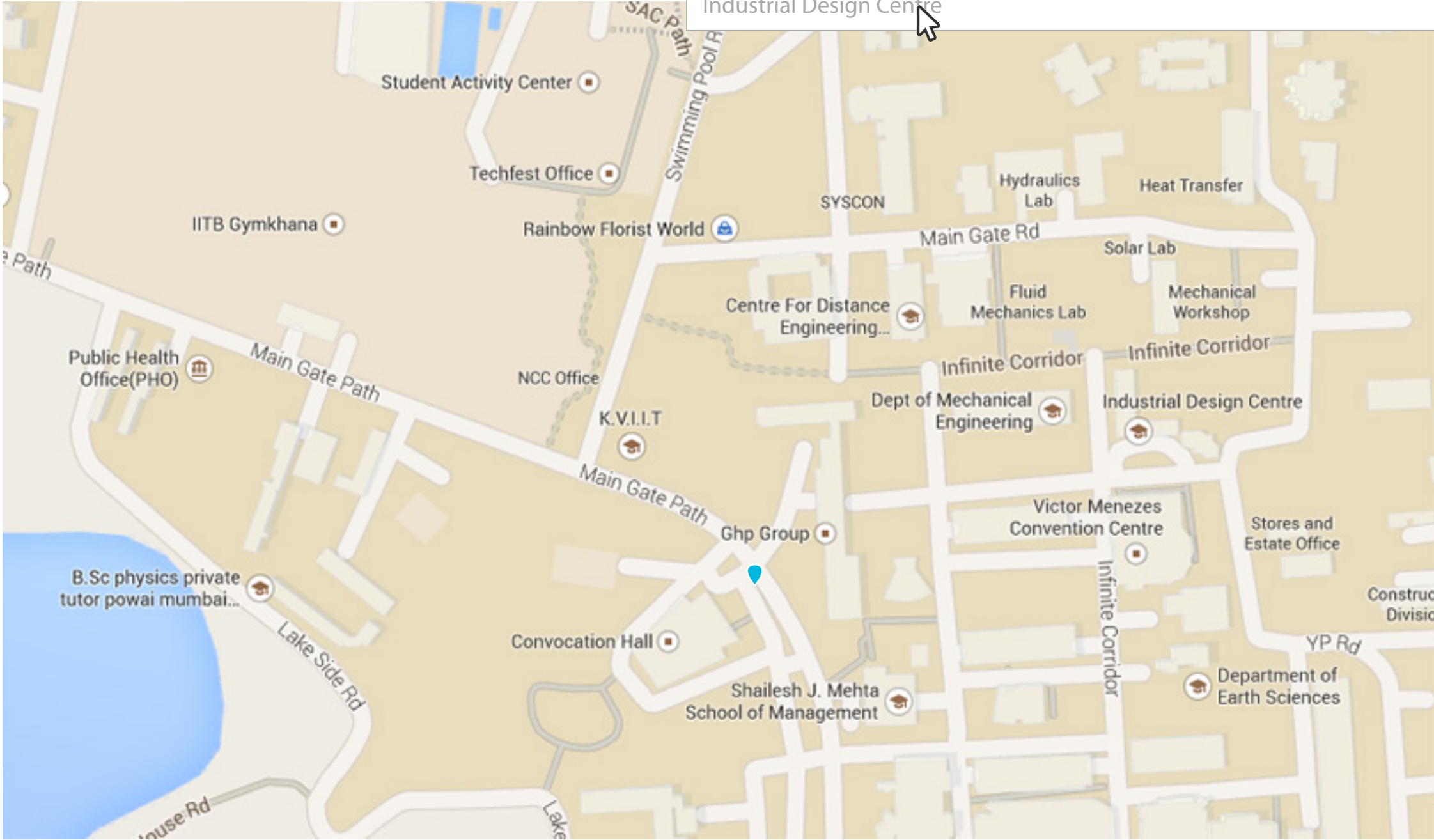
From

Convocation Hall

To

Industrial Des

Industrial Design Centre



facebook

Privacy Logout

Discuss this event

Post to Facebook ☒

Share

Aditi Rao

Avoid QIP hillside...just spotted a leopard chasing a dog

December 10 at 7:32pm

Kenneth Francis

Great news... I will go there right away!

December 10 at 7:33pm



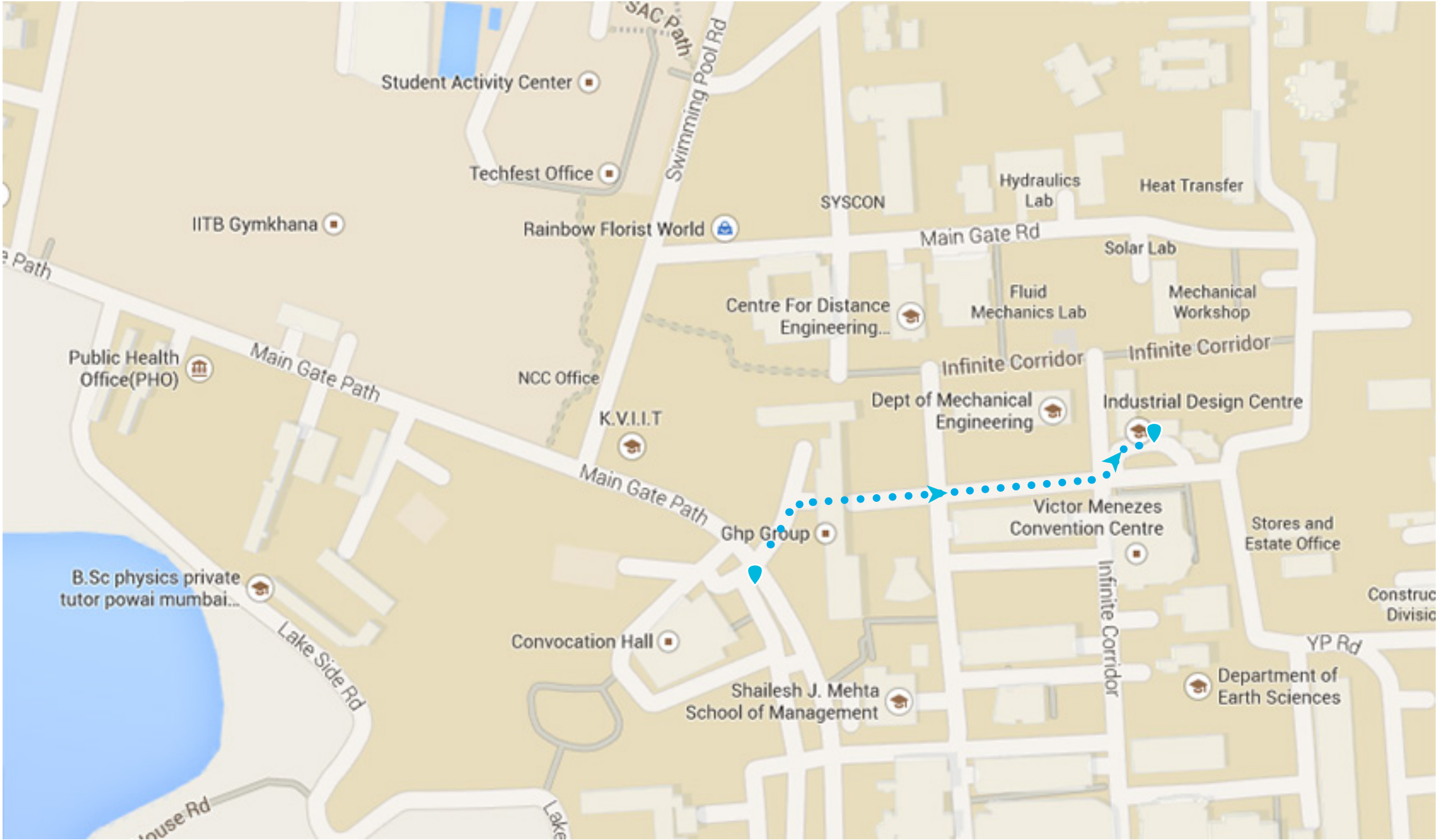


From

Convocation Hall

To

Industrial Design Centre



Route

Shortest mode of travel: **Walk**

**10:25am**  
Reach Industrial Design Centre

facebook

Privacy Logout

Discuss this event

Post to Facebook ☒

Share

Aditi Rao

Avoid QIP hillside...just spotted a leopard chasing a dog

December 10 at 7:32pm

Kenneth Francis

Great news... I will go there right away!

December 10 at 7:33pm



## **Scenario 9**

**Typed location does not exist**

**Input by user :** Type

**Output to user :** Default route

### **Assumptions:**

- i) Absence of GPS.
- ii) Absence of touchscreen input.



From

To



facebook Privacy Logout

Discuss this event

Post to Facebook ☒ Share

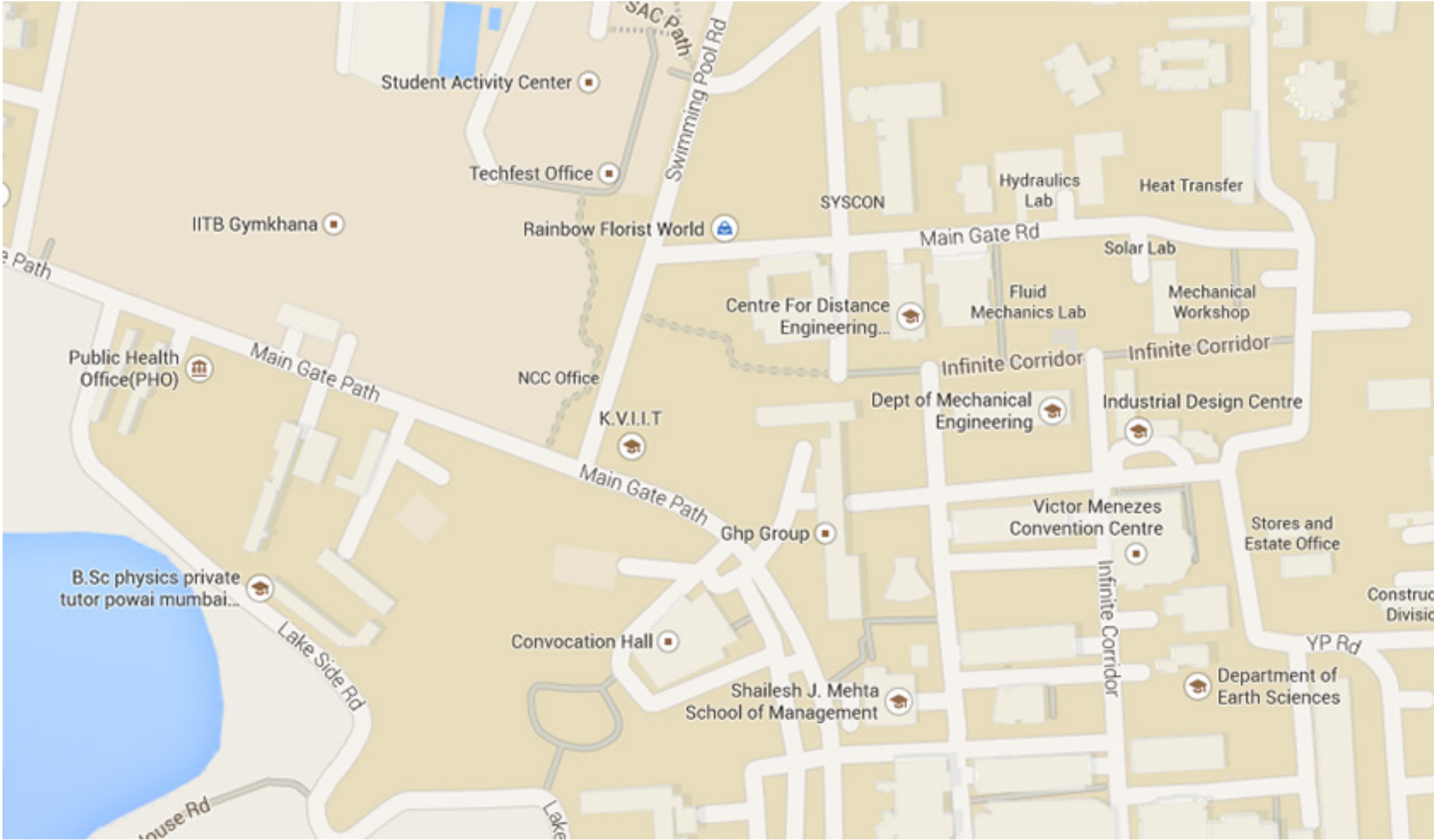
**Aditi Rao**  
Avoid QIP hillside...just spotted a leopard chasing a dog  
December 10 at 7:32pm

**Kenneth Francis**  
Great news... I will go there right away!  
December 10 at 7:33pm



From

To



facebook

Privacy Logout

Discuss this event

Post to Facebook ☒

Share

Aditi Rao

Avoid QIP hillside...just spotted a leopard chasing a dog

December 10 at 7:32pm

Kenneth Francis

Great news... I will go there right away!

December 10 at 7:33pm





From Concert Hall

To Convocation Hall



Discuss this event

Post to Facebook ☒

Share



Aditi Rao

Avoid QIP hillside...just spotted a leopard chasing a dog

December 10 at 7:32pm



Kenneth Francis

Great news... I will go there right away!

December 10 at 7:33pm



From

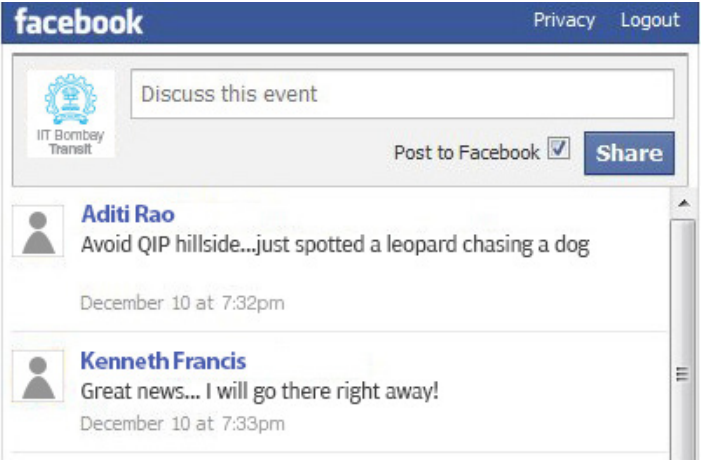
To



Error!

Location does not exist

You may want to type:  
**Convocation Hall**

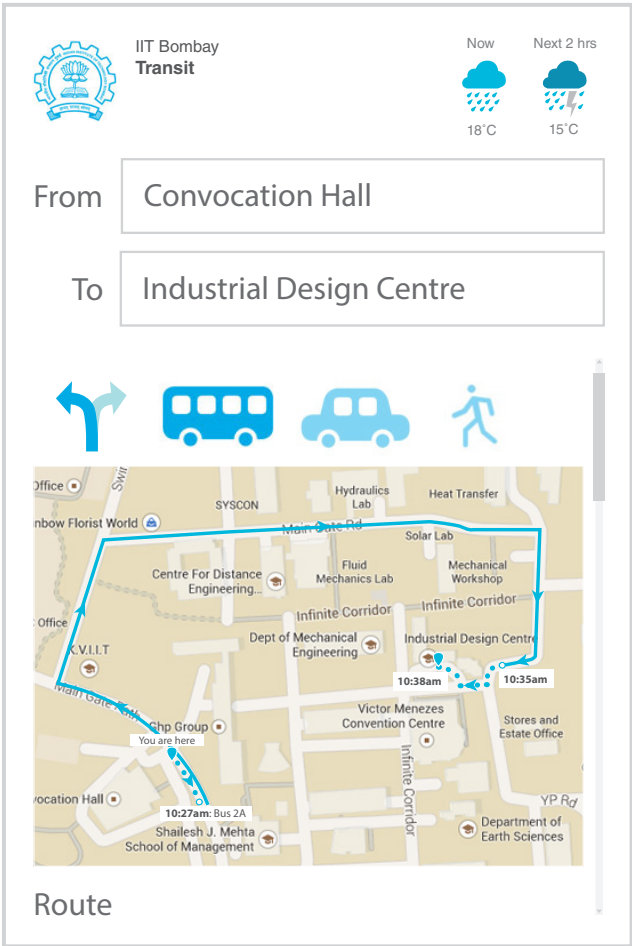




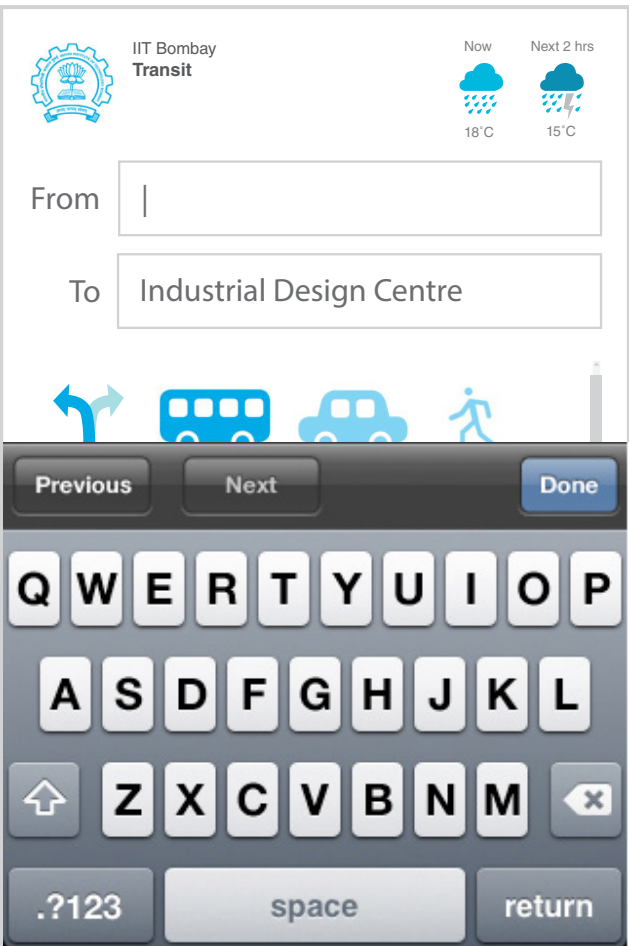
# Screen sizes

## For Mobile

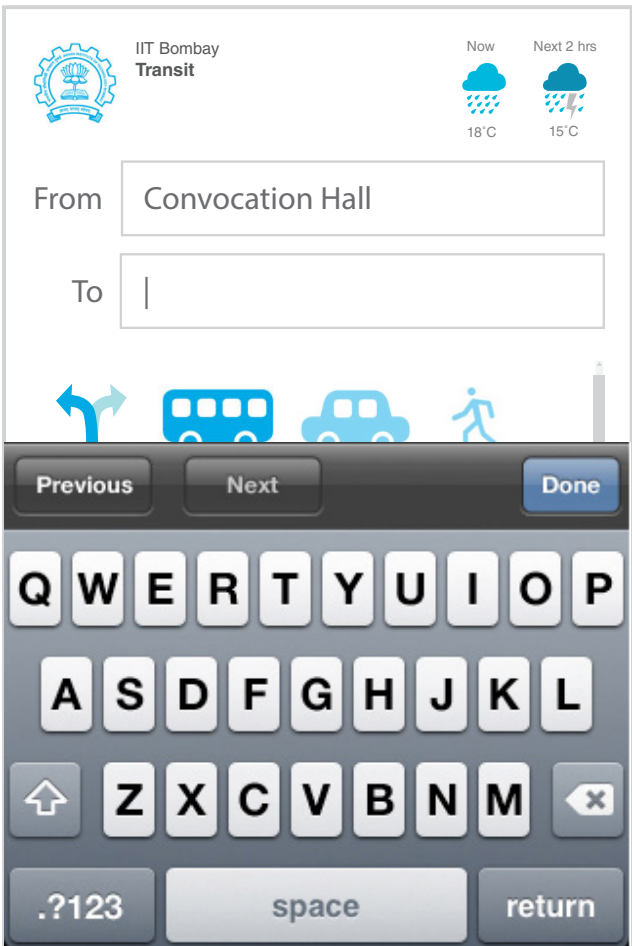
Screen size: 320px x 480px



STEP 1



STEP 2



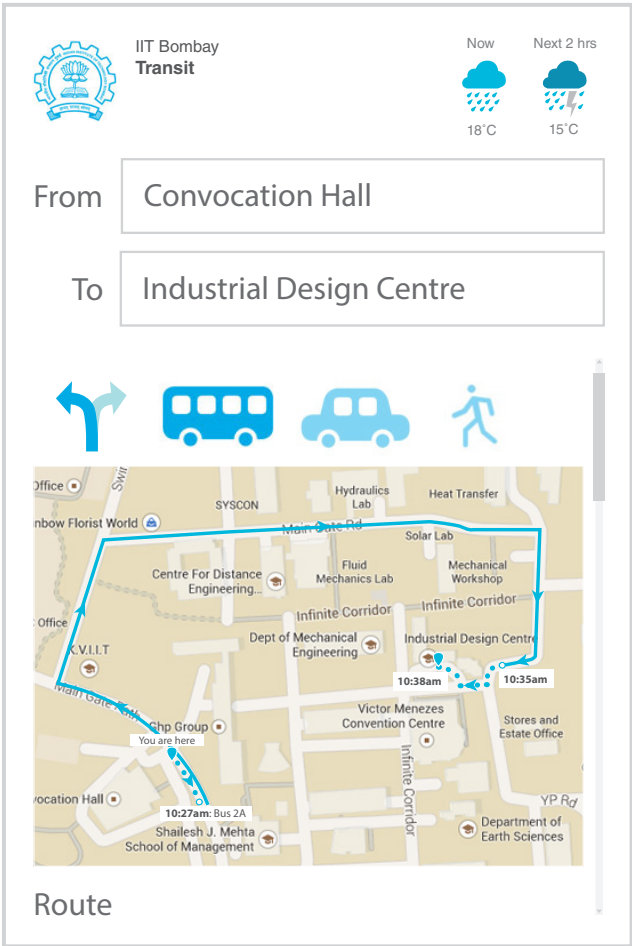
STEP 3



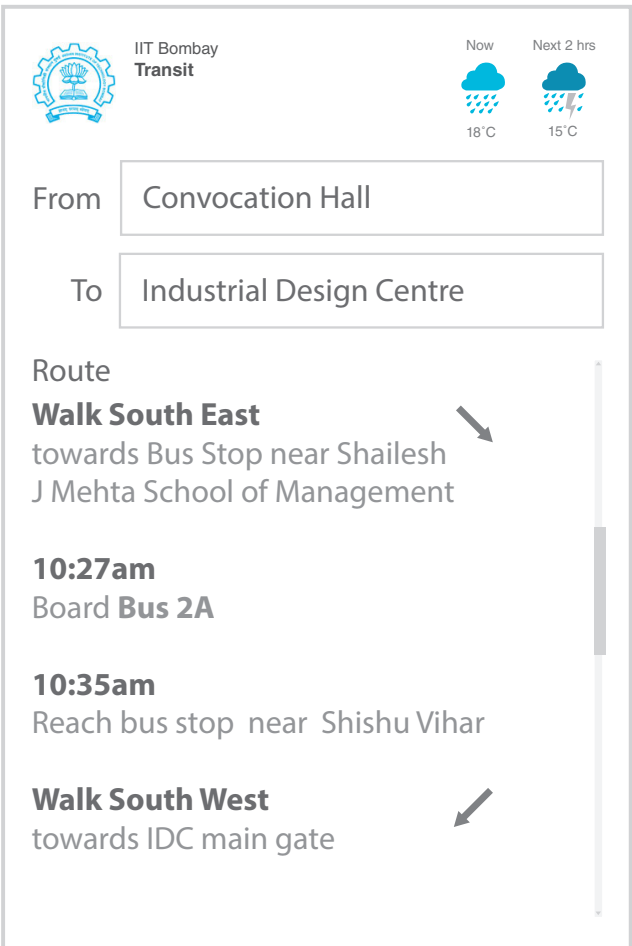
# Screen sizes

## For Mobile

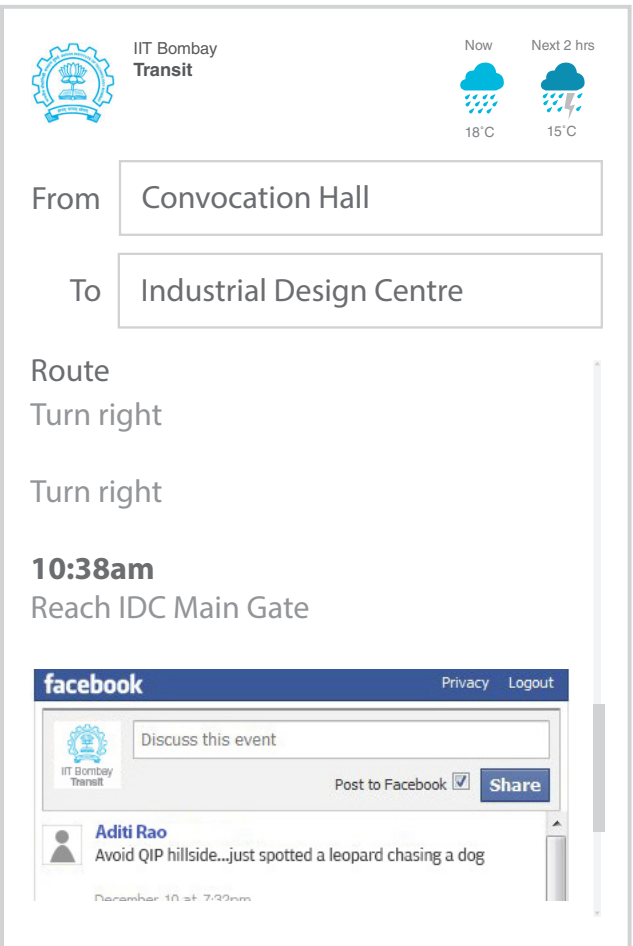
Screen size: 320px x 480px



STEP 4



STEP 5




STEP 6

# Screen sizes

## For Tablet


Screen size: 768px x 1024px



IIT Bombay


Transit

Now



18°C

Next 2 hrs




15°C


From


Convocation Hall


To

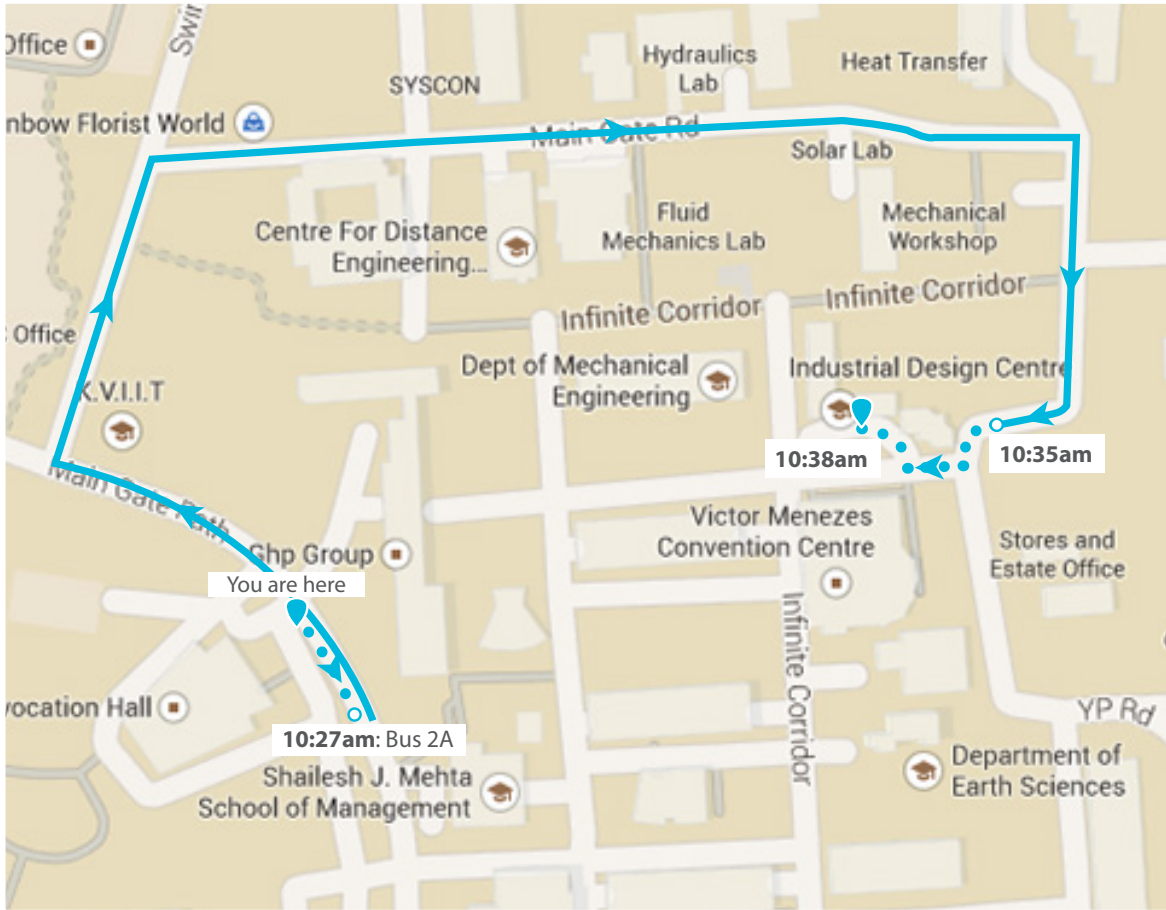
Industrial Design Centre





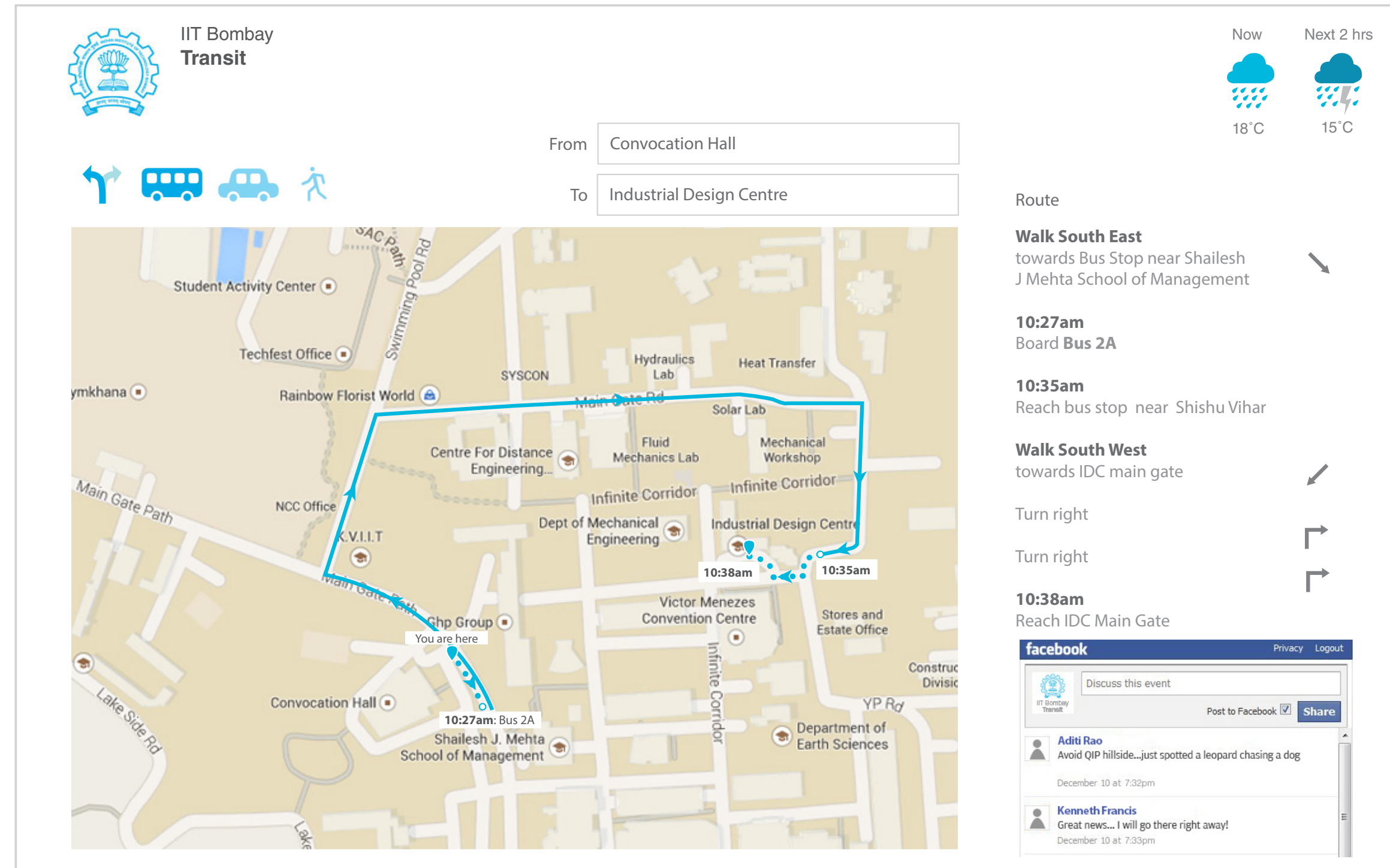






Route

Screen size:1280px x 800px





**THANK YOU**