

Digital tools for assessment of **history** learning

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The attempt of this design project is to understand how incorporating an *evaluation system* in middle school history learning could encourage *historical thinking* among students.

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1. *Chronological Thinking and Historical Comprehension*
 2. Reconstruct the literal meaning of a historical passage by identifying *who was involved, what happened, where it happened, what events led to these developments, and what consequences or outcomes followed.*
 3. Identify the central question(s) the historical narrative addresses and the *purpose, perspective, or point of view from which it has been constructed.*
 4. Differentiate between *historical facts and historical interpretations* but acknowledge that the two are related.

The assessment centred environment

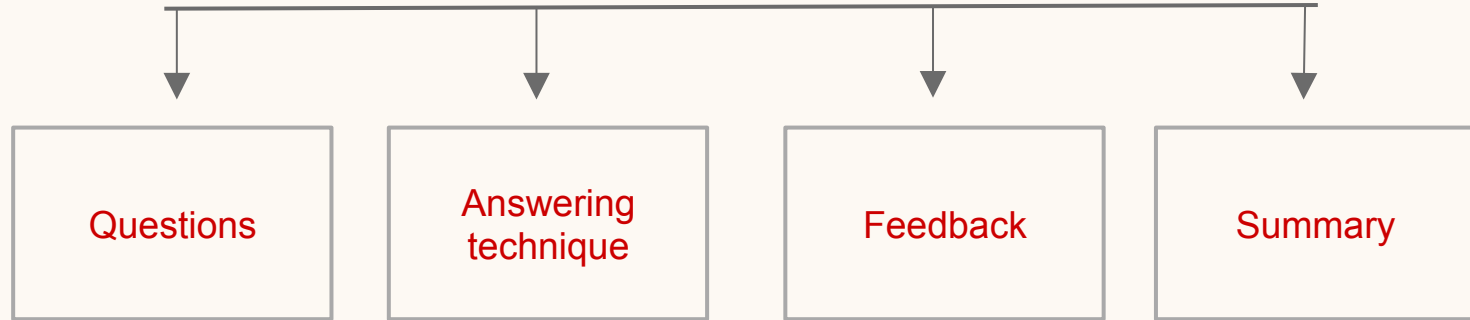
The assessment centred environment:

Emphasizes the need to provide frequent opportunities to make students' *thinking and learning visible* as a guide for both the teacher and the student in learning and instruction.

1. Formative assessment
2. **Summative assessment**

Framework

First the basic structure of the *evaluation* was set.



Model chapter: *Delhi Sultanate*

The rulers of Delhi

Table 1

RAJPUT DYNASTIES

Tomaras	early twelfth century - 1165
Ananga Pala	1130 -1145
Chauhans	1165 -1192
Prithviraj Chauhan	1175 -1192

EARLY TURKISH RULERS 1206-1290

Qutbuddin Aybak	1206 -1210
Shamsuddin Iltutmish	1210 -1236
Raziyya	1236 -1240
Ghiyasuddin Balban	1266 -1287



Iltutmish's tomb

KHALJI DYNASTY 1290 - 1320

Jalaluddin Khalji	1290 - 1296
Alauddin Khalji	1296 -1316

TUGHLUQ DYNASTY 1320 - 1414

Ghiyasuddin Tughluq	1320 -1324
Muhammad Tughluq	1324 -1351
Firuz Shah Tughluq	1351 -1388



Alai Darwaza

SAYYID DYNASTY 1414 - 1451

Khizr Khan	1414 -1421
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LODI DYNASTY 1451 - 1528

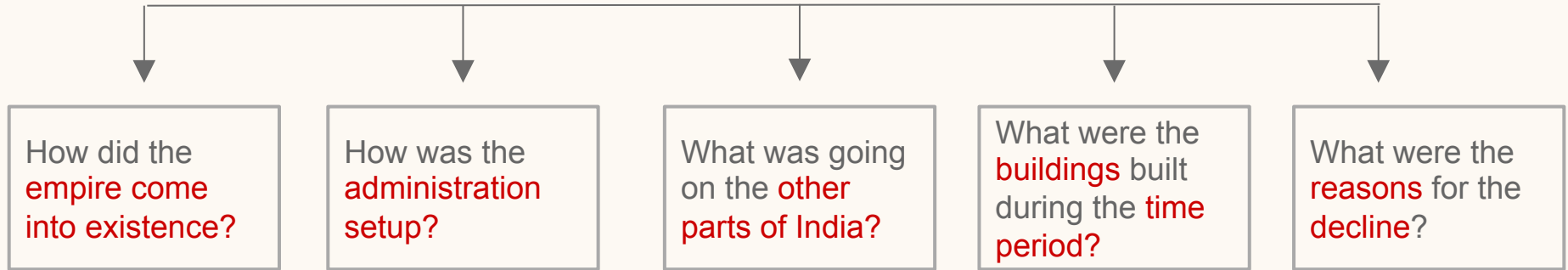
Bahlul Lodi	1451 -1489
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Firuz Shah Tughluq's tomb

Looking through *questions*

Chapter structure: *Delhi Sultanate*



Model chapter: *Delhi Sultanate*



Express Minhaj's ideas in your own words. Do you think Raziyya shared these ideas? Why do you think it was so difficult for a woman to be a ruler?



Compare Figures 2, 3, 4 and 5. What similarities and differences do you note amongst the mosques? The mosques in Figures 3, 4 and 5 show an evolution in architectural tradition that culminates in Shah Jahan's mosque in Delhi (see fig 7 in Chapter 5).

Let's do

12. Find out whether there are any buildings built by the Delhi Sultans in your area. Are there any other buildings in your area that were built between the twelfth and fifteenth centuries? Describe some of these buildings, and draw sketches of them.



Describe the ways in which the chieftains arranged for their defence.

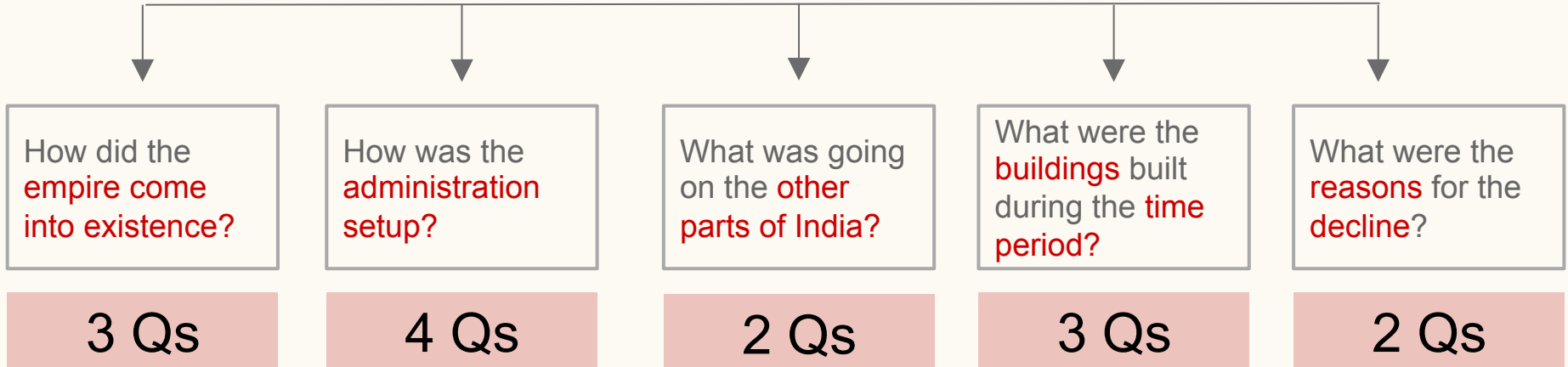
Let's understand

1. Which ruler first established his or her capital at Delhi?
2. What was the language of administration under the Delhi Sultans?
3. In whose reign did the Sultanate reach its farthest extent?
4. From which country did Ibn Battuta travel to India?

5. According to the "Circle of Justice", why was it important for military commanders to keep the interests of the peasantry in mind?
6. What is meant by the "internal" and "external" frontiers of the Sultanate?
7. What were the steps taken to ensure that muqtis performed their duties? Why do you think they may have wanted to defy the orders of the Sultans?
8. What was the impact of the Mongol invasions on the Delhi Sultanate?

Looking through questions

Chapter structure: *Delhi Sultanate*



Framework- Students application

First the basic structure of the *evaluation* was set.



Question structure: *Delhi Sultanate*

There are **3 questions** which are ways to *evaluate* if the student *understood* how the empire came into *existence*.

How did the
**empire come into
existence?**

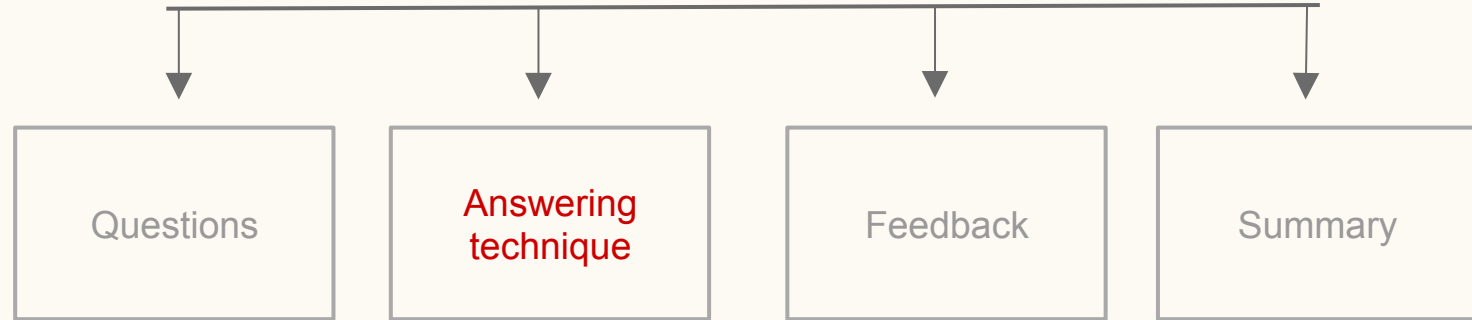
Q1: Which ruler first established his or her capital in Delhi?

Q2: The Sultanate established a center point of administration and expanded from there. Can you mark the farthest extent conquered by the Sultanate?

Q3: What is meant by external and internal frontier of the Sultanate. Mark these on a map. Also mark the expansion route of Sultanate.

Framework

First the basic structure of the *evaluation* was set.



Answer structure: *Delhi Sultanate*

There are **3 questions** which are ways to *evaluate* if the student *understood* how the empire came into *existence*.

How did the
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Q1: Which ruler first established his or her capital in Delhi?

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Textual
answer

Answer structure: *Delhi Sultanate*

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Textual
answer

Map answer

Answer structure: *Delhi Sultanate*

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How did the
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Q: Which ruler first established his or her capital in Delhi?

Textual
answer

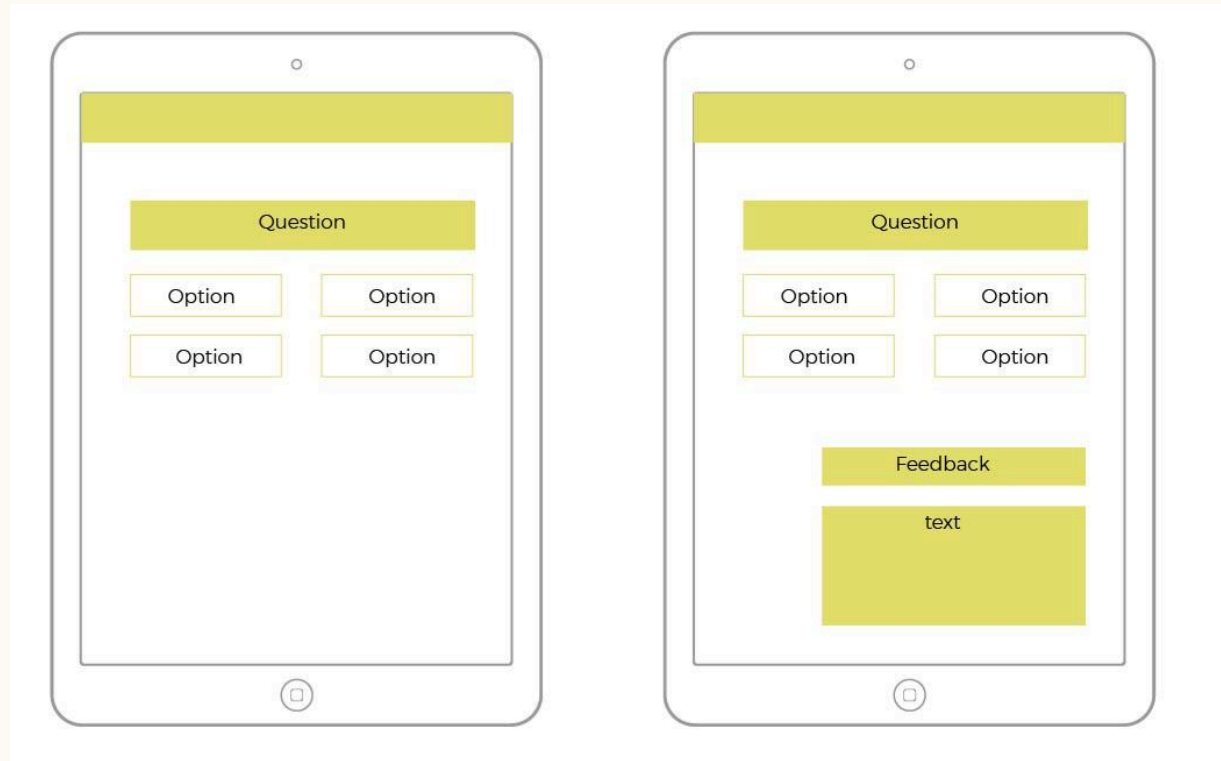
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Map answer

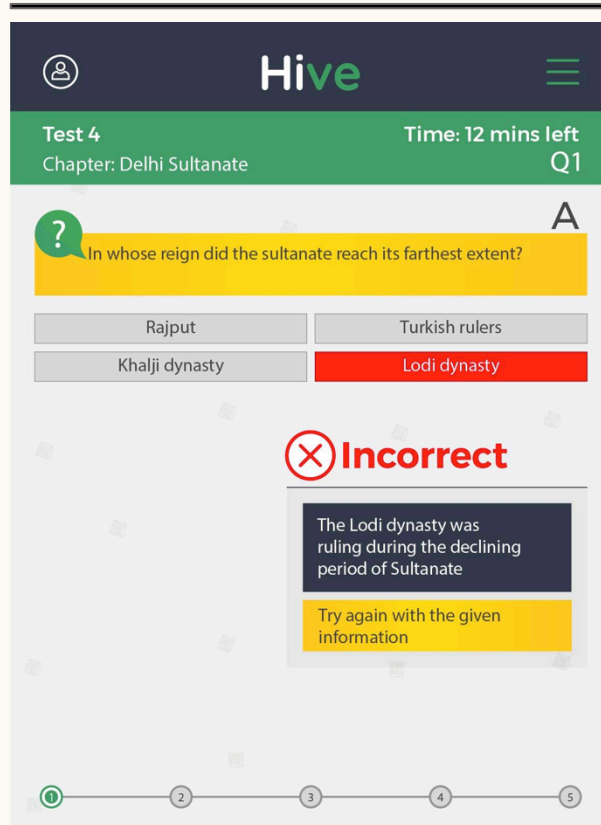
Q: What is meant by external and internal frontier of the Sultanate. Mark these on a map. Also mark the expansion route of Sultanate.

Map answer

Prototype



Prototype



Question

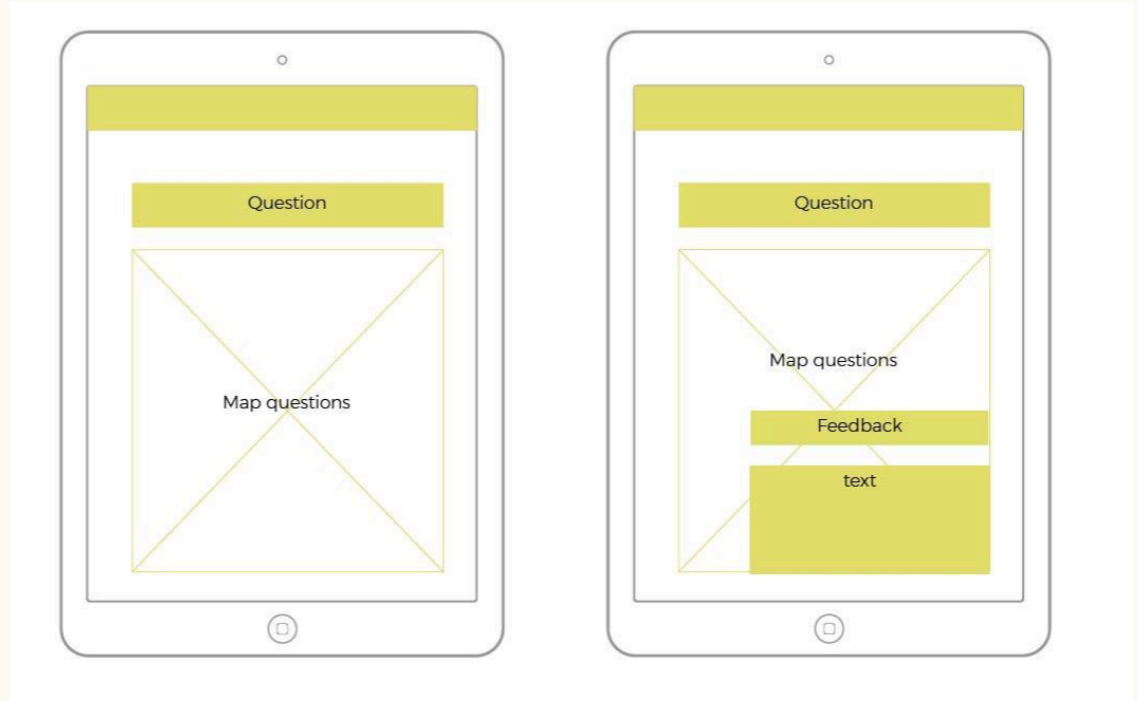
Option space

Feedback for the answer selected.

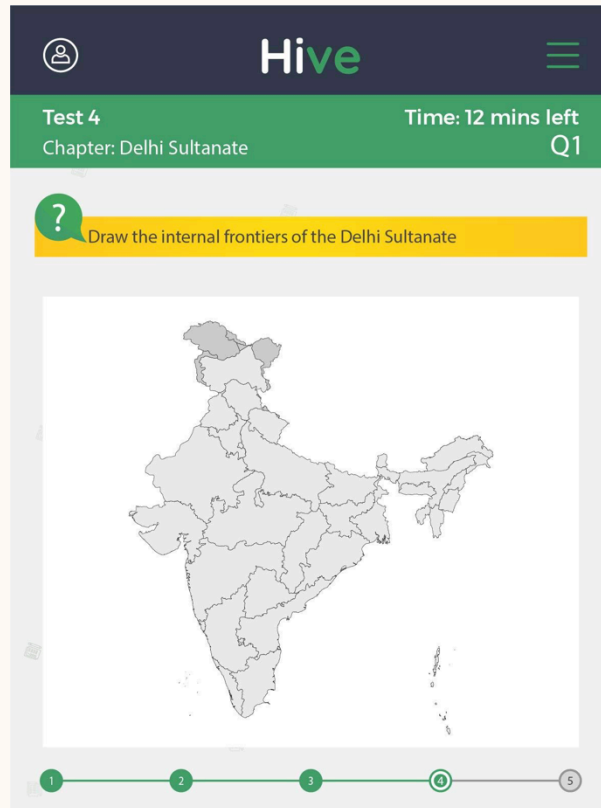
Status bar with questions

Within each section we can find that all questions cannot be **answered** the same way, some could be textual elements or some using visual elements.

Prototype 1



Prototype

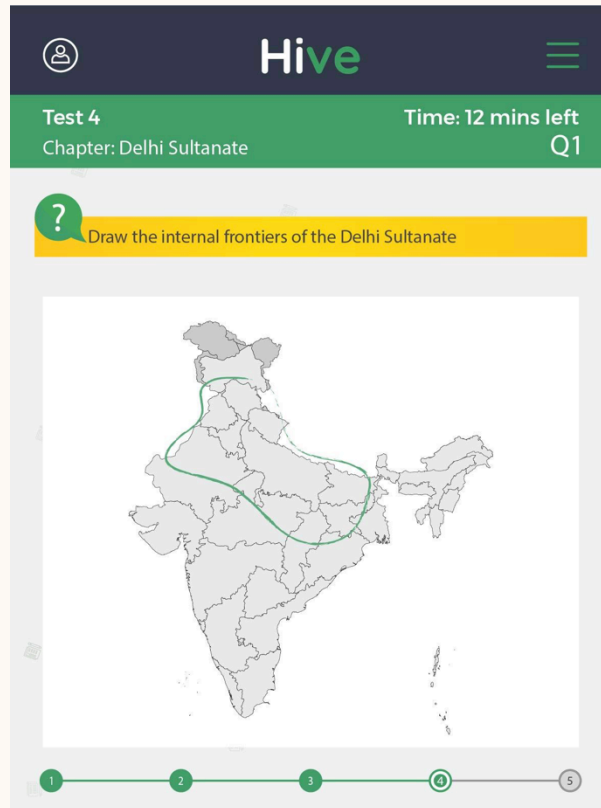


Question

Map answer space

Status bar with questions

Prototype



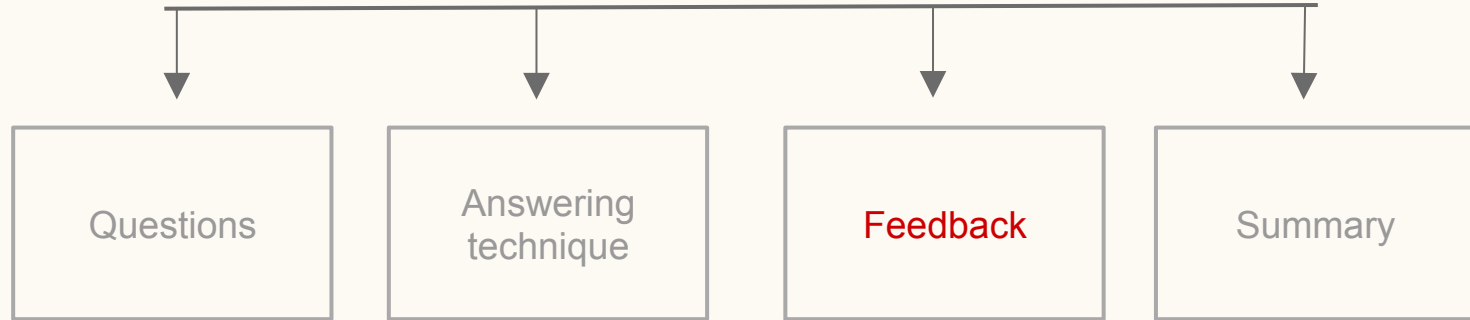
Question

Map answer space

Status bar with questions

Framework

First the basic structure of the *evaluation* was set.



Feedback structure: *Delhi Sultanate*

How to incorporate **feedbacks** for students to continue the test.

Section: How did the **empire come into existence?**

1. Sequentially arranging the questions within each section to give feedbacks

Answer of one question leading to the other

Q1 ---> Q2 ---->Q3

Feedback structure: *Delhi Sultanate*

How to incorporate **feedbacks** for students to continue the test.

Section: How did the **empire come into existence?**

-
1. Sequentially arranging the questions within each section to give feedbacks

Answer of one question leading to the other

Completing different sections within an answer bringing out causes, pre-event and post event reasoning.

Feedback structure: *Delhi Sultanate*

How to incorporate **feedbacks** for students to continue the test.

Section: How did the **empire come into existence?**

2. Within options also the giving formative feedbacks to ensure historical thinking in students.

For both correct and wrong answer feedback is given by the system prompting the student to give multiple tries to the same question.

Prototype 1

The screenshot displays the Hive app interface. At the top, a dark blue header contains a user profile icon, the 'Hive' logo, and a menu icon. Below this, a green bar indicates 'Test 4' and 'Chapter: Delhi Sultanate' on the left, and 'Time: 12 mins left' and 'Q1' on the right. A yellow question bar with a green question mark icon contains the text 'Draw the internal frontiers of the Delhi Sultanate'. The main area features a map of India with a green shaded region representing the internal frontiers. A green checkmark icon and the word 'Correct' are overlaid on the map. A dark blue feedback box at the bottom of the map contains the text: 'The internal frontiers are places which can be easy accessed from the capital. Mainly the Ganga plains and Deccan plateau.' At the very bottom, a status bar shows five question indicators, with the fourth one highlighted in green.

Question

Map answer space

Feedback for the answer selected.

Status bar with questions

Framework

First the basic structure of the *evaluation* was set.



Prototype 1

Teachers application



Hive



Class 6th

Class 7th

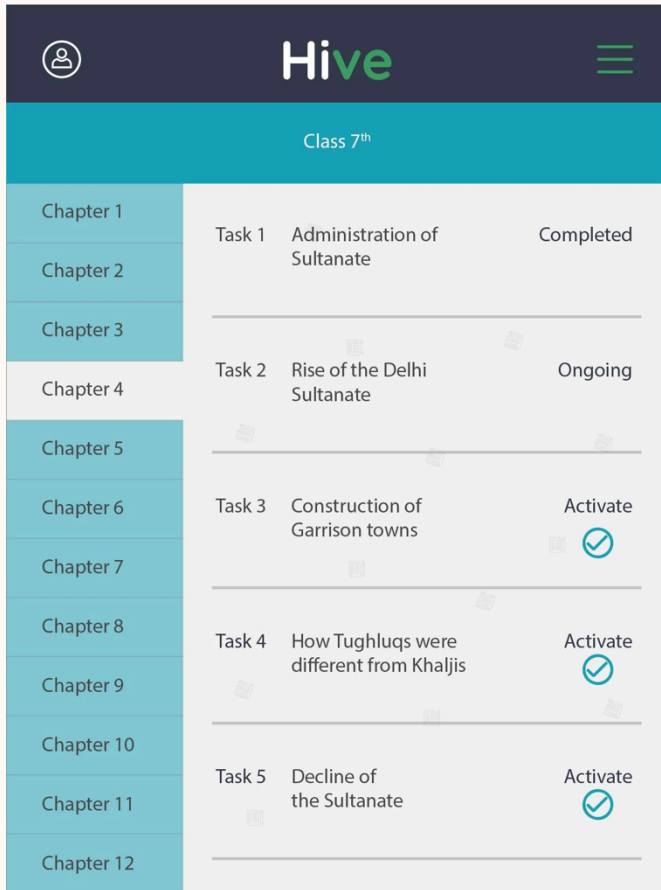
Class 8th

Class 9th

Class 10th

Teachers framework

Landing page: Choose the class



Class 7 th		
Chapter 1	Task 1 Administration of Sultanate	Completed
Chapter 2		
Chapter 3		
Chapter 4	Task 2 Rise of the Delhi Sultanate	Ongoing
Chapter 5		
Chapter 6	Task 3 Construction of Garrison towns	Activate <input checked="" type="checkbox"/>
Chapter 7		
Chapter 8		
Chapter 9	Task 4 How Tughluqs were different from Khaljis	Activate <input checked="" type="checkbox"/>
Chapter 10		
Chapter 11	Task 5 Decline of the Sultanate	Activate <input checked="" type="checkbox"/>
Chapter 12		

Teachers framework

Landing page: Choose the class



View test status per each class

Hive

Chapter 4 ▾ Task 1 T2 T3 T4 T5 T6 T7

Q1 ① ————— ② ————— ③

Q2 Q3 What were the measures to ensure stable administration in the empire?

Q3 To rule such a large empire there should be a good Revenue system and Administration system.

Q4

First Click
18 students clicked on administration which is one of the right answer.

12	16	3	6
✓ Revenue	✓ Administration	Caste	Religious

Attempts

1 st	<div style="width: 25%;"></div>
2 nd	<div style="width: 40%;"></div>
3 rd	<div style="width: 25%;"></div>

Teachers framework

Landing page: Choose the class

View test status per each class

Task result

Task result

Indicates chapter number

Question status

The screenshot displays the Hive LMS interface. At the top, there is a dark blue header with the 'Hive' logo and a user profile icon. Below the header is a teal navigation bar containing a dropdown menu for 'Chapter 4', a 'Task 1' tab, and seven other task tabs labeled 'T2' through 'T7'. A progress indicator at the top of the question content shows three steps: step 1 is completed (blue circle with '1'), step 2 is active (blue circle with '2'), and step 3 is pending (grey circle with '3'). The main content area shows 'Q3' with the question text: 'What were the measures to ensure stable administration in the empire?' and a paragraph: 'To rule such a large empire there should be a good Revenue system and Administration system.' Below the question is a 'First Click' section with the text '18 students clicked on administration which is one of the right answer.' This section contains four circular review cards: '12' for 'Revenue' (checked), '16' for 'Administration' (checked), '3' for 'Caste', and '6' for 'Religious'. At the bottom is an 'Attempts' section with three horizontal progress bars for the 1st, 2nd, and 3rd attempts, each showing a portion filled with teal.

The tabs indicate the different tasks under each chapter

Review cards according to each question

Prototype 2

Future scope

Results:

Device selection: There were positive responses on using digital devices in classroom as children were already using devices for other purposes during other times of the day.

Teachers were showing a positive response to deep seated learning and how new answering techniques to encourage historical thinking.

Thank you.