

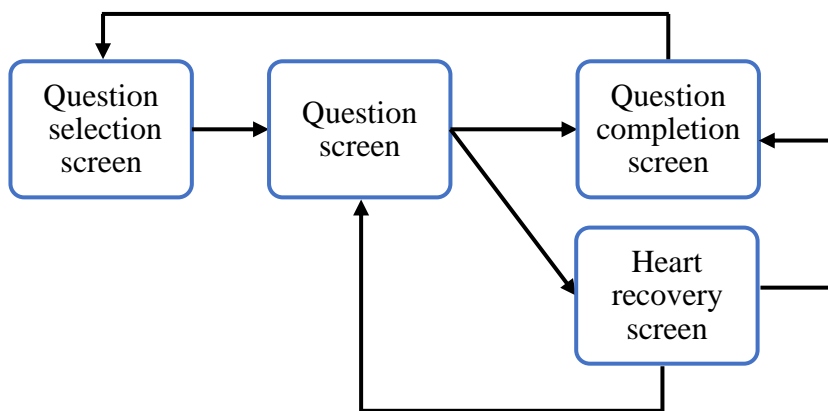
## Test Project C1-AM (Japan)

This test project will develop a **smartphone application (Android or iOS)** that makes learning a new language fun.

The product manager has provided you with product wireframes for both phone and tablet versions.

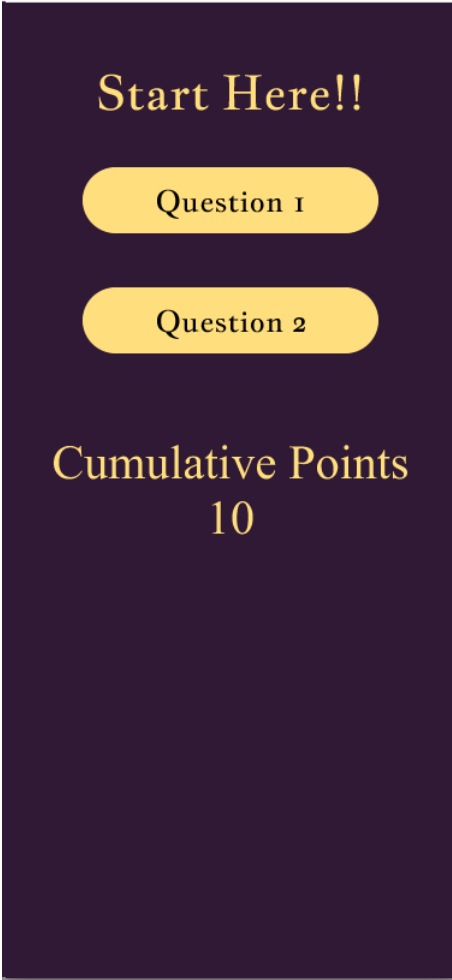
As a developer of mobile applications, your task is to develop a smartphone application (Android or iOS) that makes learning a new language fun.

The name of the application is **“Learning English”**.



Please refer to the **"Prototype"** and **"Explanation of Web API"** to develop Question selection screen, Question screen, Heart recovery screen, and Question completion screen.

The competition time is **2 hours and 30 minutes**.

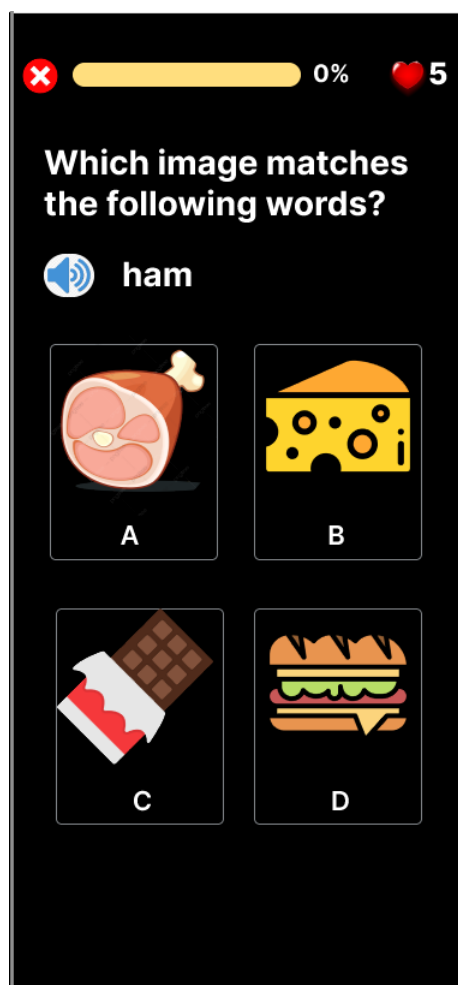
Question selection screen	
	<p>Please create this screen to meet the following specifications.</p> <ul style="list-style-type: none"><li>● Please create this screen with the same layout as the prototype.</li><li>● Colors, text sizes, and fonts are optional. However, please use colors, text sizes, and fonts that are easy for users to interact with.</li><li>● Clicking the 'Question 1' button will start question number 1.</li><li>● Clicking the 'Question 2' button will start question number 2.</li><li>● Please display the user points. Fetch the data from the server for the initial display.</li></ul>

The Question screen has three types:

- Single-choice questions
- Multiple-choice questions
- Multiple-choice + Sorting questions

In this task, you should create screens for 'Single-choice questions' and 'Multiple-choice + Sorting questions'. The question type will be randomly selected. However, there may be cases where the same type of question is presented consecutively.

#### Question Screen (Single-choice): 'Pre-selection State '

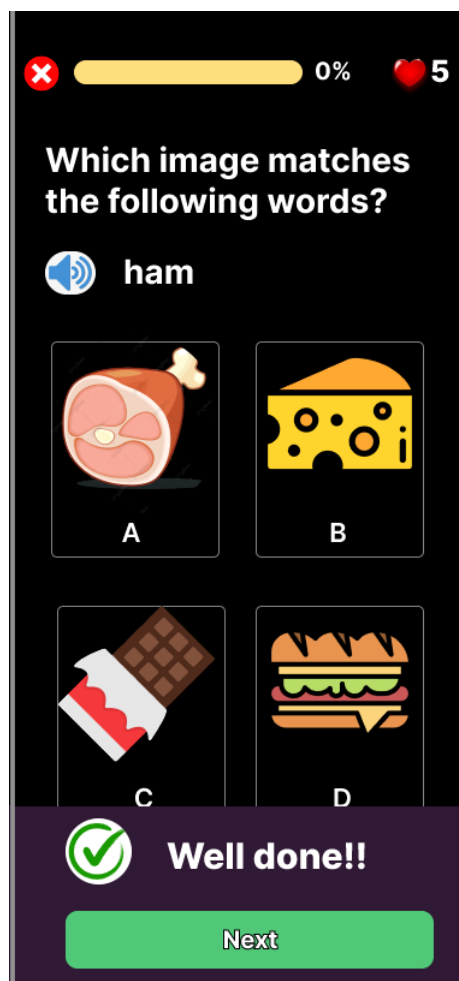


Please create this screen to meet the following specifications.

- Please create this screen with the same layout as the prototype. (Colors, text sizes, and fonts are optional. However, please use colors, text sizes, and fonts that are easy for users to interact with.)
- Users can select one option from the choices provided.  
(The number of choices varies depending on the question.)
- It is preferable to specify images for the choices.

In addition to the above, please make any other adjustments that would make the interface more user-friendly.

**Question Screen (Single-choice): 'Correct Answer State'**



Below are the specifications for the screen when the answer is correct:

- When the answer is correct, buttons labeled "Check icon", "Well done", and "Next" will appear at the bottom of the screen.
- Clicking the "Next" button will proceed to the next question.

In addition to the above, please make any other adjustments that would make the interface more user-friendly.

**Question Screen (Common): "1st Question, 2nd Question, ... 10th Question"**

1st Question



2nd Question

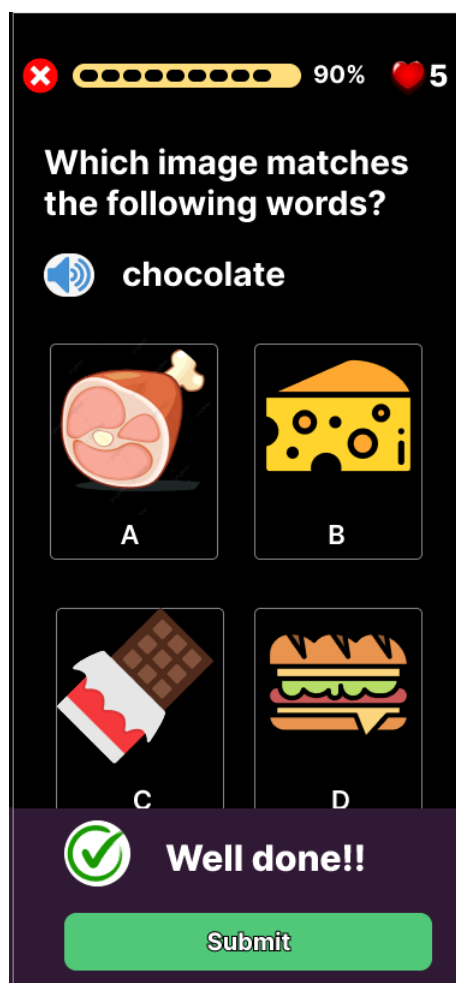


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10th Question

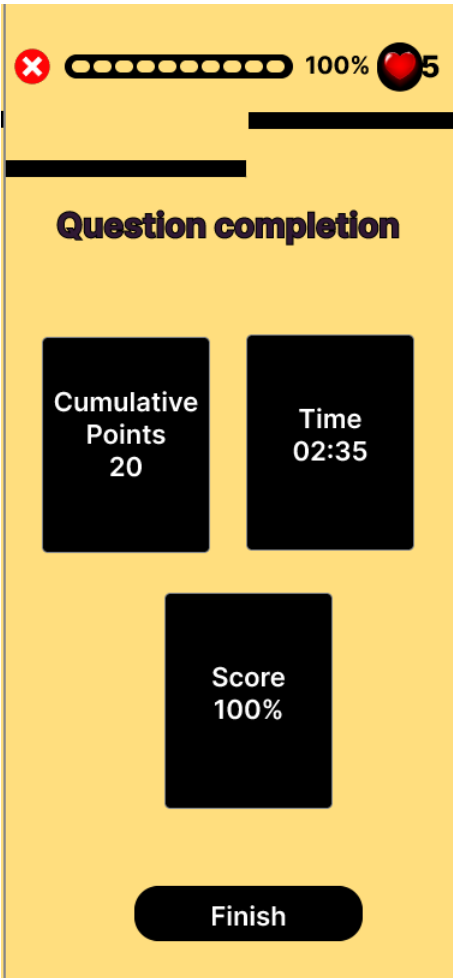


- The number next to the heart icon at the top of the question screen starts at 5.
- As the questions progress, the top of the screen changes as shown at left.

**Question Screen (Common) "End of Question"**

The specifications described above apply to the "Single Choice Question," but they also apply to the "Multiple Choice + Sorting Question."


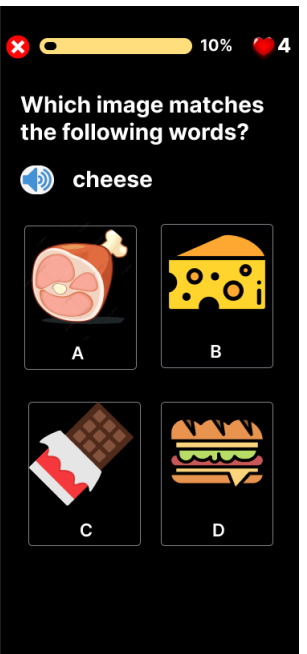
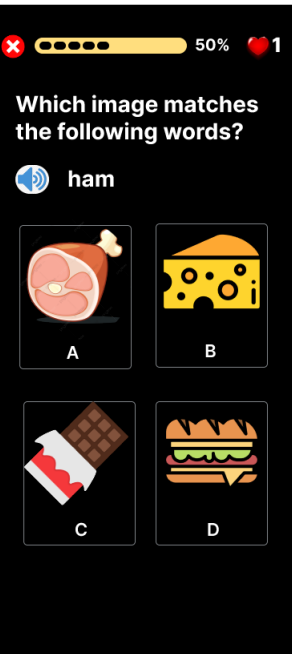
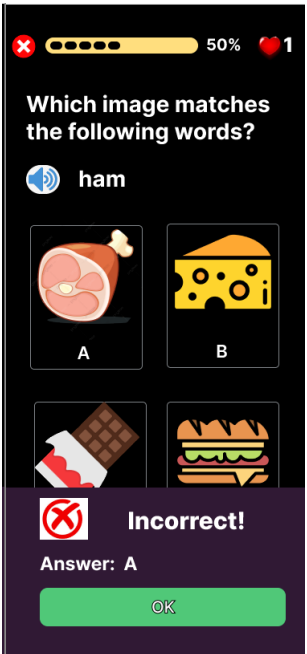
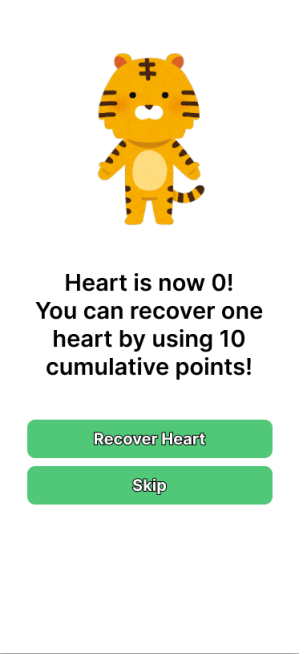
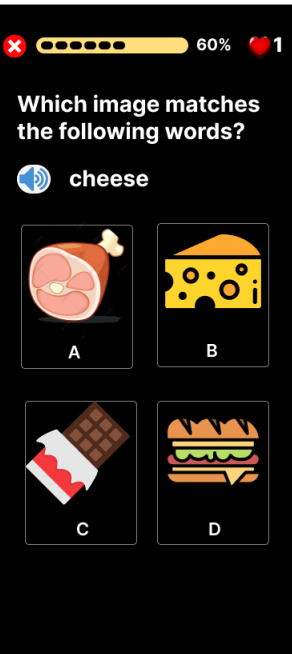
- When answering up to the 10th question, the "Next" button for correct answers or the "OK" button for incorrect answers will change to a "Submit" button.
- Clicking the "Submit" button will transition to the Question Completion screen.

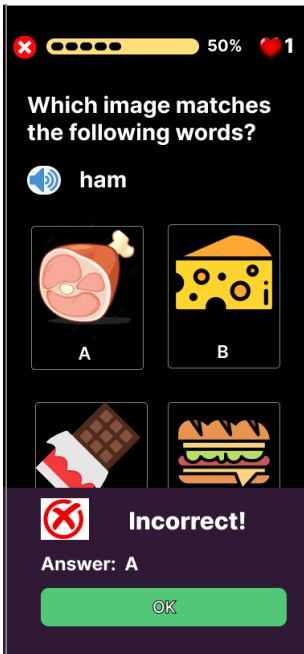
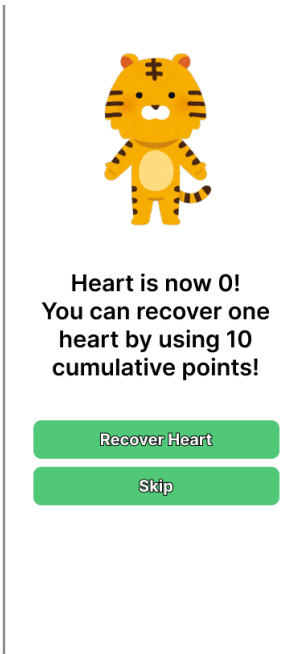
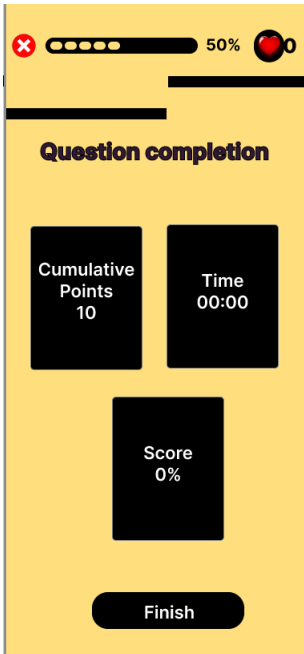
Question completion screen	
 <p>The mockup shows a yellow background with a black header bar. At the top left is a red 'X' icon. Next to it is a progress bar with 10 yellow circles, all filled, followed by '100%'. To the right is a red heart icon with the number '5' next to it. Below the header, the text 'Question completion' is centered. Underneath are three black boxes: 'Cumulative Points 20' on the left, 'Time 02:35' on the right, and 'Score 100%' in the center. At the bottom is a black rounded rectangle with the word 'Finish' in white.</p>	<p>The above is for "single-choice questions," but the same specifications apply to "multiple-choice + sorting questions" as well.</p> <ul style="list-style-type: none"> <li>● "Cumulative Points" represent the total number of correct answers by the user in this app. Each correct answer earns 1 point.</li> <li>● "Time" measures the total time from when the user begins answering the first question until the user finishes answering the tenth question and presses the "Submit" button. This time is displayed in "MM:SS" format (e.g. 02:35).</li> <li>● "Score" is calculated using the following formula:  <math display="block">\text{Score} = \text{Number of Correct Answers} / 10</math></li> <li>● Clicking the "Finish" button will navigate back to the Question selection screen.</li> </ul> <p>If the number next to the heart decline below 1 and the user is forcibly redirected to the "Question Completed" screen, the following specifications apply:</p> <ul style="list-style-type: none"> <li>● "Cumulative Points" represent the total number of correct answers by the user in this app. Each correct answer earns 1 point.</li> <li>● "Time" should be displayed as "00:00."</li> <li>● "Score" is calculated using the following formula:  <math display="block">\text{Score} = \text{Number of Correct Answers} / 10</math></li> </ul>

**Question screen (single selection) "Incorrect State" -1**

Here are the specifications for the screen when the answer is incorrect:

- If the answer is incorrect, "Wrong icon", "Incorrect! ", "Answer: Correct word" and the "OK" button shall be displayed.
- Clicking the "OK" button will proceed to the next question. When clicking the "OK" button to proceed to the next question, the number next to the "heart" at the top of the screen will decrease by 1.
- If the heart reaches zero and the cumulative points are 10 or more, the screen described in (5) will be displayed. Clicking the "Recover Heart" will consume 10 cumulative points to restore 1 heart.

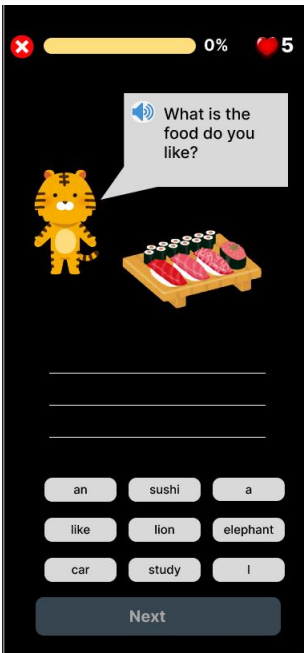
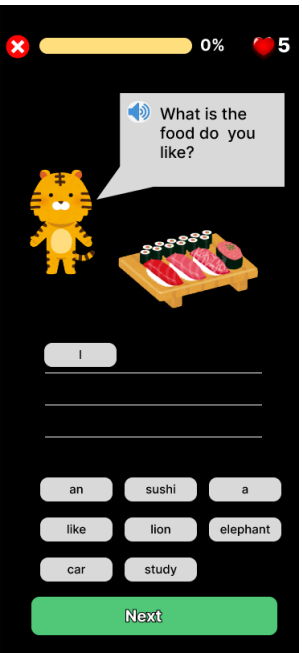
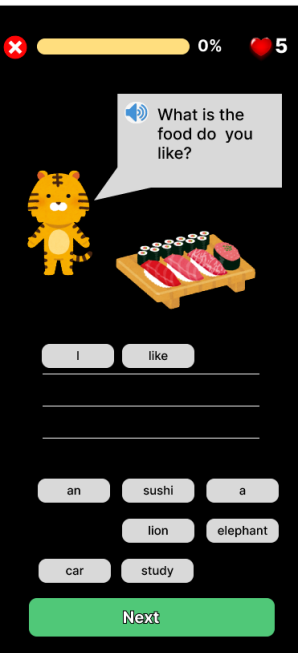
(1)		(2)		(3)	
(4)		(5)		(6)	

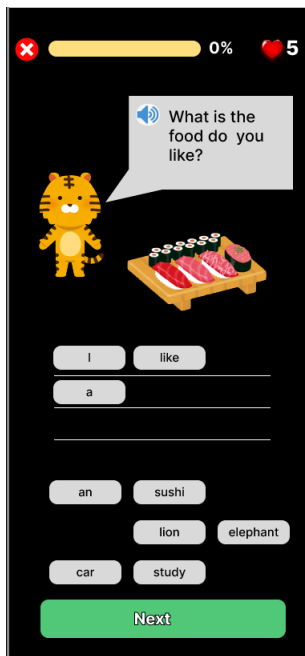
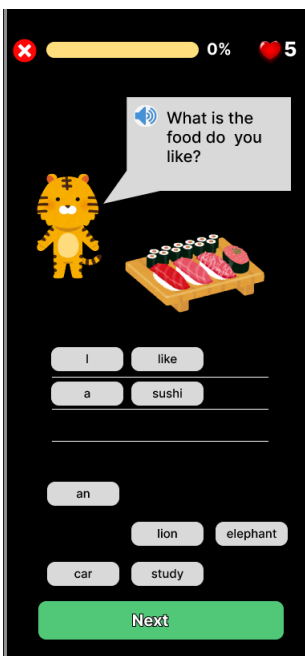
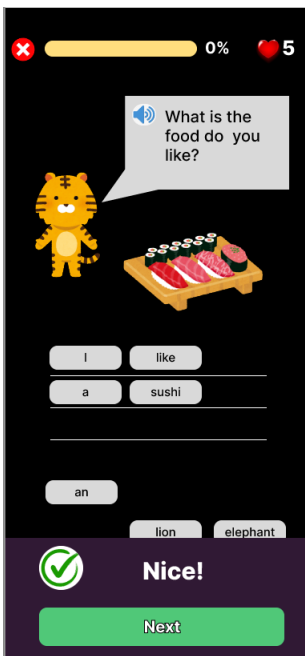
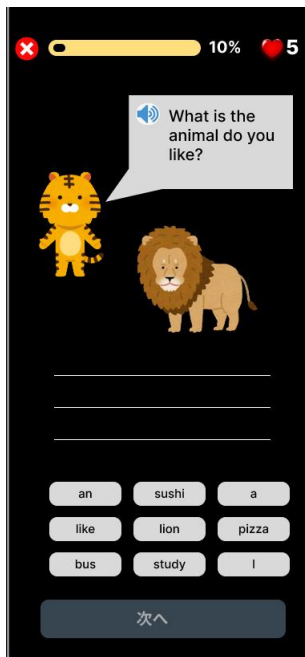
Question screen (single selection) "Incorrect State" -2					
<ul style="list-style-type: none"><li>If the heart reaches zero and the cumulative points are 10 or more, the screen described in point (8) will be displayed. Clicking the "Skip" button will transition to the Question Completion screen.</li></ul>					
(7)		(8)		(9)	



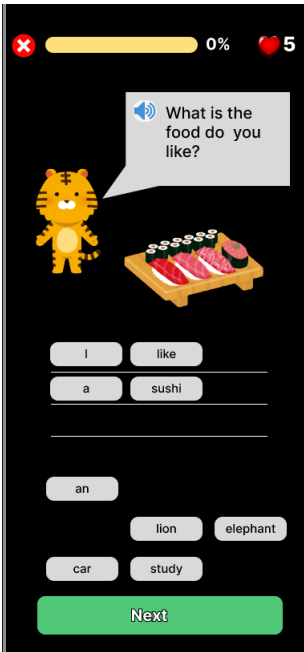
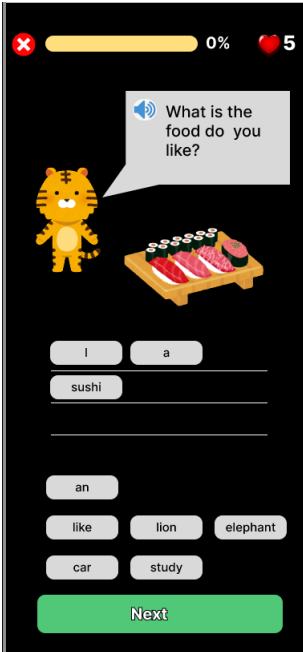
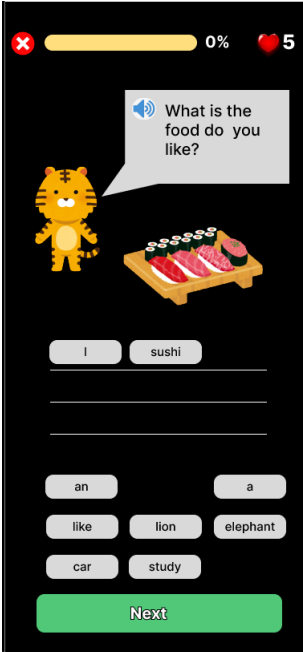
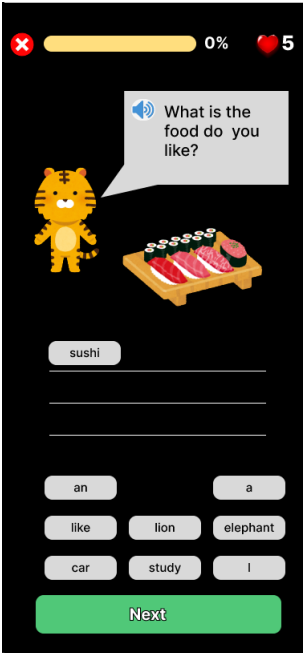
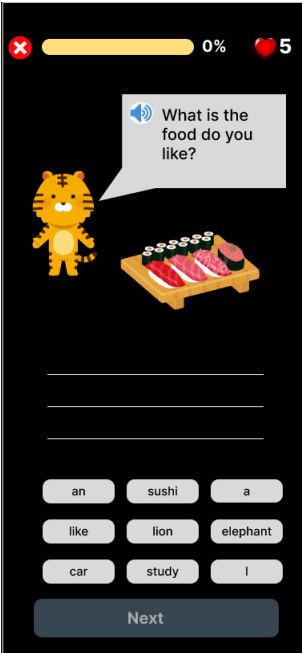
**Question screen (multiple selection + sorting questions) "Correct Answer State" -1**

- Please find the specifications for the screen below. Ensure that users can select options as shown. The layout should be consistent with the prototype.
- Colors, text sizes, and fonts are optional. However, please use colors, text sizes, and fonts that are easy for users to interact with.
- The "Next" button should not be clickable until the user selects the first option. There should be a visual difference indicating whether the button is clickable or not.

(1)		(2)		(3)	
					

Question screen (multiple selection + sorting questions) “Correct Answer State” -2					
<ul style="list-style-type: none"><li>● Clicking the "Next" button will verify the answers.</li><li>● Upon correct answer, the bottom of the screen will display "Tick icon", "Nice!", and a "OK" button.</li><li>● Clicking the "OK" button will proceed to the next question.</li></ul>					
(4)		(5)		(6)	
(7)					

Question screen (multiple selection + sorting questions) "Incorrect State"					
<ul style="list-style-type: none"> <li>Clicking the "Next" button will verify the answers.</li> <li>If the answer is incorrect, "Wrong icon", "Incorrect! ", "Answer: Correct words" and the "OK" button shall be displayed.</li> <li>Clicking the "OK" button will proceed to the next question.</li> </ul>					
(1)		(2)		(3)	
(4)		(5)		(6)	

Question screen (multiple selection + sorting questions) "Cancel the selected choice"					
<p>On the Question screen, the selection changes from being selected to not selected as follows:</p> <ul style="list-style-type: none"> <li>Clicking on the selected choice cancels it. The canceled choice returns to its original position.</li> <li>When nothing is selected, the "Next" button becomes unclickable. The "Next" button should not be clickable until the user has selected the first option. There should be a visual difference indicating whether the button is clickable or not.</li> </ul>					
(1)		(2)		(3)	
(4)		(5)		(6)	

## Explanation of Web API

### ■ Token acquisition (POST)

<http://160.16.55.98:8000/api/token/>

Please send your username: **ks-nagoya00** and password: **JP24Mar-rei** in "JSON" format.

Please refer to "learning\_english.postman\_collection2.json" for details.

### ■ Token verification (POST)

<http://160.16.55.98:8000/api/token/verify/>

Send the access value of the token obtained in "JSON" format.

Please refer to "learning\_english.postman\_collection2.json" for details.

### ■ Token reacquisition (POST)

<http://160.16.55.98:8000/api/token/refresh/>

Send the refresh value of the token obtained in "JSON" format.

Please refer to "learning\_english.postman\_collection2.json" for details.

### ■ For obtaining questions (GET)

<http://160.16.55.98:8000/api/questions/1>

<http://160.16.55.98:8000/api/questions/2>

The "1" and "2" parts represent the question number (easy:1, hard:2).

At this point, the Bearer token is also sent.

Please refer to "learning\_english.postman\_collection2.json" for details.

### ■ For obtaining cumulative points (GET)

<http://160.16.55.98:8000/api/users/points/1>

<http://160.16.55.98:8000/api/users/points/2>

In the above URLs, "1" and "2" represent the user IDs.

At this point, the Bearer token is also sent.

Please refer to "learning\_english.postman\_collection2.json" for details.

## Test Project C1-AM (Japan)

### ■ For adding cumulative points (POST)

<http://160.16.55.98:8000/api/users/points/add>

Send the following data in JSON format: {"user\_id" : "XX", "points" : "NN"} Replace "XX" with the user ID and "NN" with the points to be added.

Bearer token should also be included in the request.

Please refer to "learning\_english.postman\_collection2.json" for details.

### ■ For subtracting cumulative points (POST)

<http://160.16.55.98:8000/api/users/points/subtract>

Send the following data in JSON format: {"user\_id" : "XX", "points" : "NN"} Replace "XX" with the user ID and "NN" with the points to be subtracted.

Bearer token should also be included in the request.

Please refer to "learning\_english.postman\_collection2.json" for details.

### ■ User for application

Competitor			User for application		
COMPETITOR CODE	COUNTRY / REGION	GIVEN NAME / FAMILY NAME	USER_ID	NAME / PASSWORD	Email
01	China	Yuhang Huang	1	ks-shinjuku01 JP24Mar-ichi	kenschool-shinjuku01@outlook.jp
02	China	Xiaohang Zhu	2	ks-shinjuku02 JP24Mar-ni	kenschool-shinjuku02@outlook.jp
03	Chinese Taipei	Wei-Hung Lai	3	ks-shinjuku03 JP24Mar-san	kenschool-shinjuku03@outlook.jp
04	Colombia	Roberto Carlos Noguera Cordoba	4	ks-ikebukuro01 JP24Mar-yon	kenschool-ikebukuro01@outlook.jp
05	Colombia	Alexis Mauricio Arevalo Roza	5	ks-ikebukuro02 JP24Mar-go	kenschool-ikebukuro02@outlook.jp
06	Japan	Tomoya Hiraiwa	6	ks-ikebukuro03 JP24Mar-roku	kenschool-ikebukuro03@outlook.jp
07	Kazakhstan	Olzhas Tynyshtyk	7	ks-yokohama01 JP24Mar-nana	kenschool-yokohama01@outlook.jp
08	Kazakhstan	Konstantin Ivanin	8	ks-yokohama02 JP24Mar-hachi	kenschool-yokohama02@outlook.jp
09	Korea	Jongwon Kim	9	ks-yokohama03 JP24Mar-kyu	kenschool-yokohama03@outlook.jp