Talk of Thrones

ITIS 6400/8400: Principles of Human Computer Interaction

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Design description

Our design is aimed to specifically help the community of 'Game of Thrones' fans. With respect to our need finding activity, certain issues with existing systems were discovered.
Following are the design goals we have discovered:

- Make the application user intuitive to serve users across all age groups and regions.
- Put a minimal cognitive load on the user.
- Enhanced, effective feedback to users 'actions.
- Provide highly interactive platform for users to engage in conversations

On evaluating the design goals, various concepts were thought about. The aptest design concept that addresses the design goals is "A site that functions as a common platform for the fans of the community to interact with having features such as cross-regional availability, inbuilt language translator, and reader, with an easy to understand interface that can be navigated effortlessly. The platform would enable users to download related content, engage in multiplayer games/trivia and provide users with live feed and updates from the franchise".

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Rationale of the design decisions

One of the most important thing that we kept in our mind while working through the design of Talk of Thrones Project was that it bridges communities and individuals with ideas, the latest digital trends, breaking news and all that with just a click of a button.

Our mission is to help people discover a forum where they can be their true selves, and empower our community to flourish.

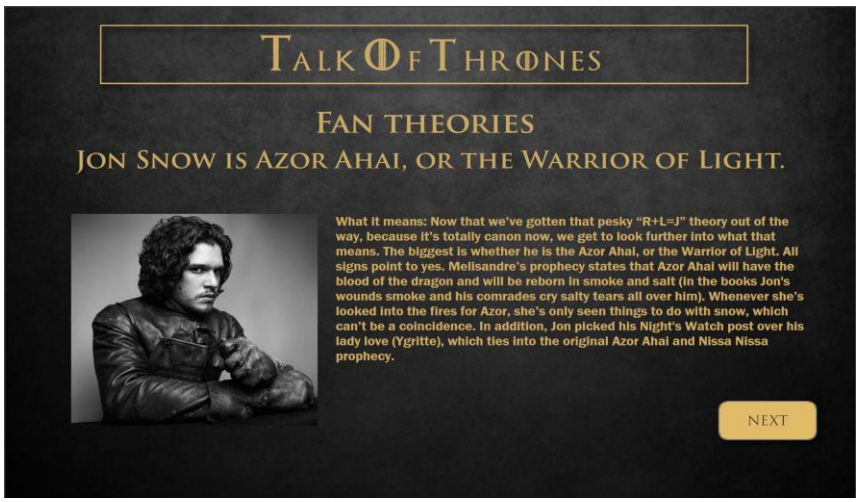
Keeping in mind the constraints (time, cost, scope and limited resources), designing a Tablet application looked to be the most feasible out of all design alternatives.

Features such as ease of use and learning, high efficiency, cost effectiveness and flexibility are some important aspects that pushed us to make use of a Tablet application as our choice of design over virtual reality/assistant.

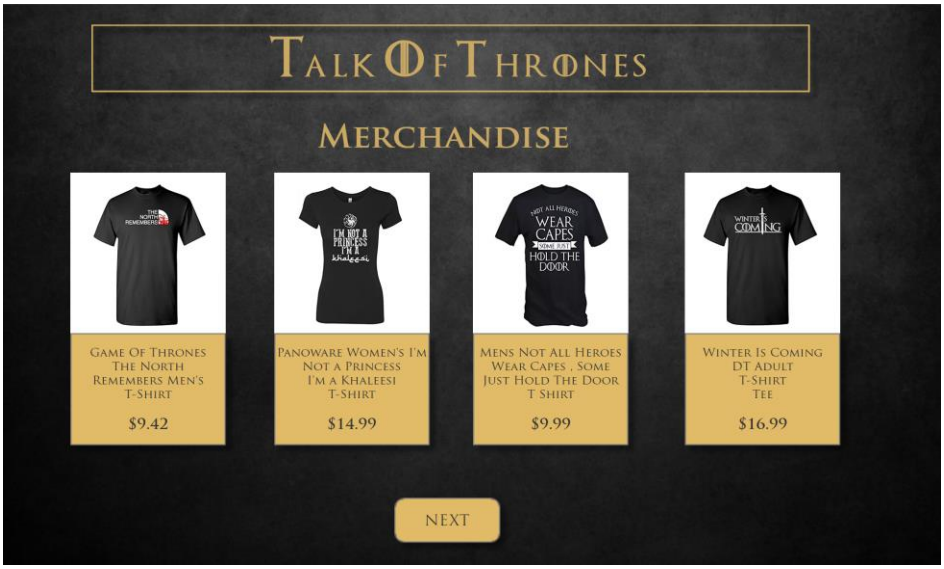
Long story short, few things that make our choice of design even more feasible are: - Enhanced, effective feedback to users' actions, minimal cognitive load on the user, highly interactive platform for users to engage in conversations.

Below are few screenshots from our application which make the above stated features more apparent.

Above is the screen that displays the capability of our application to serve people with different abilities.



Anyone can create a forum on nearly any topic imaginable. Each forum is independently moderated by volunteer users.



In addition to sharing content including stories, links, spoilers, and images, community members can also purchase their favorite merchandise.

Another feature that we incorporated in our design was the immediate feedback and Chat feature which can also be seen on any post on TOT. Chats are often the best part about TOT content—they provide additional information, vigorous discussion, context, and often humor.

VISUAL DESIGNING OF 'TALK OF THRONES'

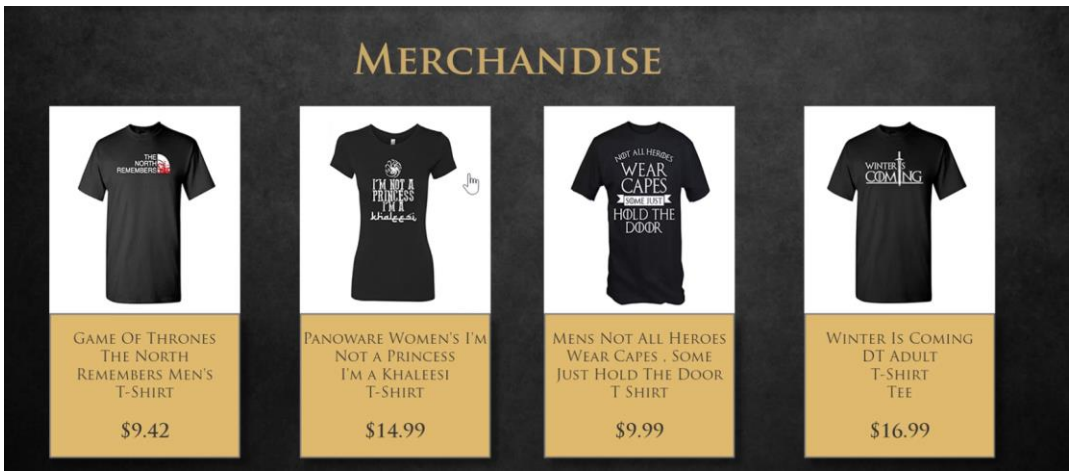
When the medium of interaction was decided to be a tablet, it was imperative for us to come up with a design that is not only appealing but also intuitive and easy to use. To ensure this, various design guidelines and design patterns were extensively used throughout the application. One of the primary objectives was to enable the users to bridge the gap between the gulfs of execution and evaluation for which instant feedback was necessary. All the tasks within our application provide instant feedback providing the users with a rich user interface.

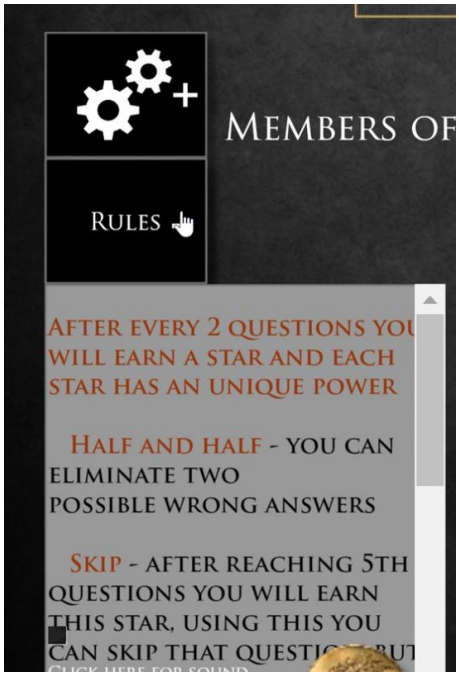
The primary affordance was an application that enabled users to stay updated with the latest news regarding the TV series 'Game of Thrones' and be able to talk to fellow franchise fans. Signifiers have been generously used throughout the application wherever required. Prime examples would include labeled menu options, settings option with an instantly recognizable 'screw and bolt' logo and so on.

Coloring scheme plays an equally important role when it comes to making the application more appealing to the users and hence we used the concept of *'Few Hues'* where in only 2 or 3 prominent colors are used throughout the application. The idea is to keep the interface simple and easy to interpret.

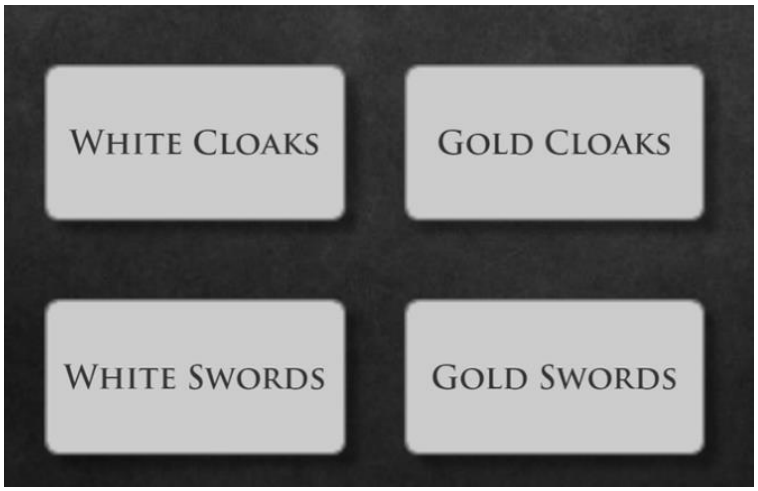
To separate images from text and make a smooth visual transition for the user while navigating through the application, we used '*Hairlines'* pattern. This pattern ensures a subtle division between the said images and text and this can be seen in effect in the 'Shop' section of our application wherein products are separated using hairlines. The products are also represented using a '*Thumbnail Grid*' pattern which means that all the products are shown in thumbnail on the merchandise section of the page.

Another desirable pattern that was used was collapsible panel during the 'Game' section of the application wherein the said pattern was used in describing the rules and regulations of the game. Since rules do not need to be present all the time taking usable real estate on the screen, we used collapsible panels for this as shown in the image below.

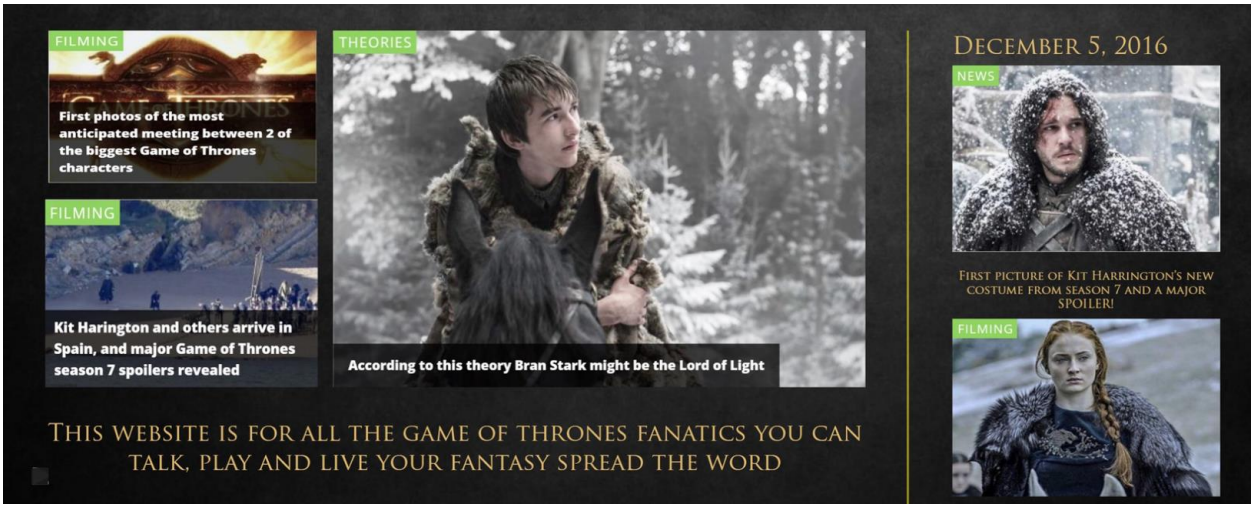




When it came to the options provided for the game, we used '*Grid of Equals'* as the design pattern so as to give equal prominence to all the options as depicted in the image below:

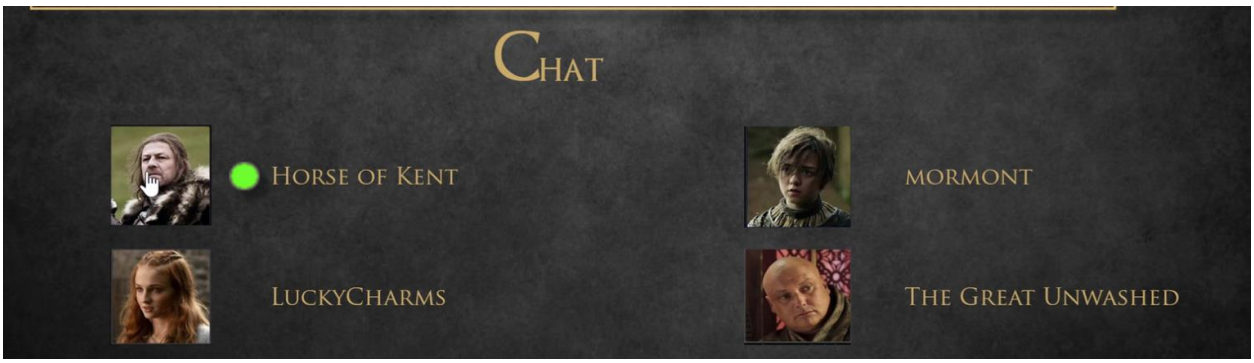


For the main page of the application, we have used an '*Editorial Mix'* design pattern to show a regular series of news articles and links. This pattern is also used in combination with the '*Center Stage'* design pattern to draw the attention of the users to the main articles on the page. For our application, we have embedded news articles and images sourced and pooled from various other websites.



The next prominent design pattern involved is the '*Modal Panel'* which was used again in the 'Game' section of the application where the user is required to select a 'House' and thereafter an 'avatar' before proceeding to the game. A modal panel essentially restricts the user from performing subsequent tasks without performing the preceding task, thereby creating a constraint.

Next, in the 'Fan Talk' menu option of our application we used the design pattern called '*Conversation Starter'* to enable the user to initiate a conversation, expand it to a discussion and so on.



Fonts Used:

Since the application revolves around 'Game of Thrones' we not only wanted our application to provide all the features that fans demand but also make our application resemble the original franchise. This required us to download and use the fonts used in 'Game of Thrones' TV Series. Hence the HTML files generated from our laptop when run on the university systems may not show our application with the right font. Therefore, we are including the font as part of our submitted files. We are also including a screen recording of the demo of our application.

Heuristic Evaluation and Experiment Design

Heuristic evaluation is a usability inspection method for computer software that helps to identify usability problems in the user interface design. The following is the heuristic evaluation done on our prototype design.

Goals of our usability study

1. Evaluate the prototype and ask the users for suggestions for improvement.
2. Take surveys to identify what works good for the prototype and works bad.
3. Make changes to the prototype on the basis of suggestions given by the users.
4. Provide users with a natural, intuitive, attractive and error-free design.

We evaluated the design on the based on the following usability aspects:

a. Ease of Navigation – How easy is it for users to navigate through the experiments.

b. Visual Quality – The overall visual quality of the user interface.

c. Interactivity – The interactivity of the design and how it works.

d. Consistency – The uniformity of the design throughout all screens.

e. Achievability of the task given – The extent by which the task given to users was achievable.

f. Overall rating – The overall rating of the design.

Evaluation Methodology

Five users were asked to use the prototype and do a specific task. After performing the task, they were asked to fill out a short survey. Apart from the survey, certain questions were also asked to the users. The results of the survey and the answers to the questions were analyzed to conduct an evaluation on the prototype.

Users Recruited

The five users recruited to evaluate the prototype were all Information Technology students, studying human computer and interaction.

Tasks asked to perform

1. Play the trivia game under "House Stark".
2. Buy a mug from the merchandise store.
3. Read "Samwell Tarly's" theory under the theory section.

Each user was asked to perform one task from the above mentioned three tasks.

Questions asked

1. What could be improved in the application?
2. Were you able to naturally figure out the navigation flow of the application? (i.e. was the application navigation intuitive)

Survey

The following survey was used for the evaluation. The survey asked users to rate the application based on ease of navigation, visual quality, consistency, interactivity, helpfulness for main task and overall rating. A scale of 1 to 3 was used. 1 being the lowest and 3 being the highest.

	1	2	3
Ease of Navigation			

Visual Quality			
Interactivity			
Consistency			
Achievability of the task given			
Overall Rating			

Five users were asked to go through the above-mentioned evaluation steps. We documented all the results in a defined manner making it easier to analyze and come up with results for evaluation. Here are the evaluation reports for the five users.

USER – 1

Task asked to be performed - Play the trivia game under "House Stark".

Observation - The user could perform the task easily. The problem he faced was that, he was not able to navigate back to a previous question.

Survey Results

	1	2	3
Ease of Navigation			X
Visual Quality			X
Interactivity			X
Consistency			X
Achievability of the task given			X
Overall Rating			X

Answers to questions

1) What could be improved in the application?
   The trivia should have a feature to go back to the question.

2) Were you able to naturally figure out the navigation flow of the application?
   Yes, the design was intuitive and the navigation was easy.

USER – 2

Task asked to be performed - Buy a mug from the merchandise store.

Observation - The user could place an order for the mug. He was confused about retracing the order again. He felt that the order placing process was simple.

Survey Results

	1	2	3
Ease of Navigation			X
Visual Quality			X
Interactivity			X
Consistency		X	
Achievability of the task given		X	
Overall Rating			X

Answers to questions

1) What could be improved in the application?
   Order tracking needs to be added, also payment info needs to be there in the fully functioning application.

2) Were you able to naturally figure out the navigation flow of the application?

Yes, navigation was very self-explanatory. However, the order placing process felt that it needs to be worked on by adding e-commerce features like payment checkout and tracking.

USER – 3

Task asked to be performed - Read "Samwell Tarly's" theory under the theory section.

Observation - The user could read the theory successfully. He felt that he should be able to keep up with future discussions going on about the theory.

Survey Results

	1	2	3
Ease of Navigation			X
Visual Quality			X
Interactivity			X
Consistency			X
Achievability of the task given			X
Overall Rating			X

Answers to questions

1) What could be improved in the application?
   A subscription for the "theory" section should be there, allowing users to follow the future discussions on the theory.

2) Were you able to naturally figure out the navigation flow of the application?
   Yes, the design was intuitive and the navigation was easy.

USER – 4

Task asked to be performed - Play the trivia game under "House Stark".

Observation - The user could perform the task easily. He felt that the options for power-ups were interesting and gave it a feel of a game. User took time in giving the answer.

Survey Results

	1	2	3
Ease of Navigation			X
Visual Quality			X
Interactivity			X
Consistency		X	
Achievability of the task given			X
Overall Rating			X

Answers to questions

1) What could be improved in the application?
   The timer function can be implemented, so that a user can keep track of the time he took to give the trivia.

2) Were you able to naturally figure out the navigation flow of the application?
   Yes, the prototype was easily navigable.

USER – 5

Task asked to be performed - Freely interact and navigate the whole application.

Observation - The user was able to easily navigate throughout the application. One issue she faced was that she had issues in identifying some of the icons in the prototype.

Survey Results: -

	1	2	3
Ease of Navigation			X
Visual Quality			X
Interactivity			X
Consistency			X
Achievability of the task given			X
Overall Rating			X

Answers to questions

1) What could be improved in the application?
   More visually appealing and intuitive icons should be used.

2) Were you able to naturally figure out the navigation flow of the application?
   Yes, the navigation was easy but icons can be improved to be more self-explanatory.

Analyzing and reporting data results

The main aim of the study was to analyze the common hardships faced by the users of our application and improve in those sections.

In our evaluation study a set of participants were asked to perform certain tasks using the application and provide a feedback rating ranging from 1 to 3 where 1 being the lowest in satisfaction and 3 being the highest. The feedback rating was further categorized into various sections to get a better understanding of where our product did well and where was it lacking.

A fair amount of data was collected from the study which was further analyzed to report the problems with our app.

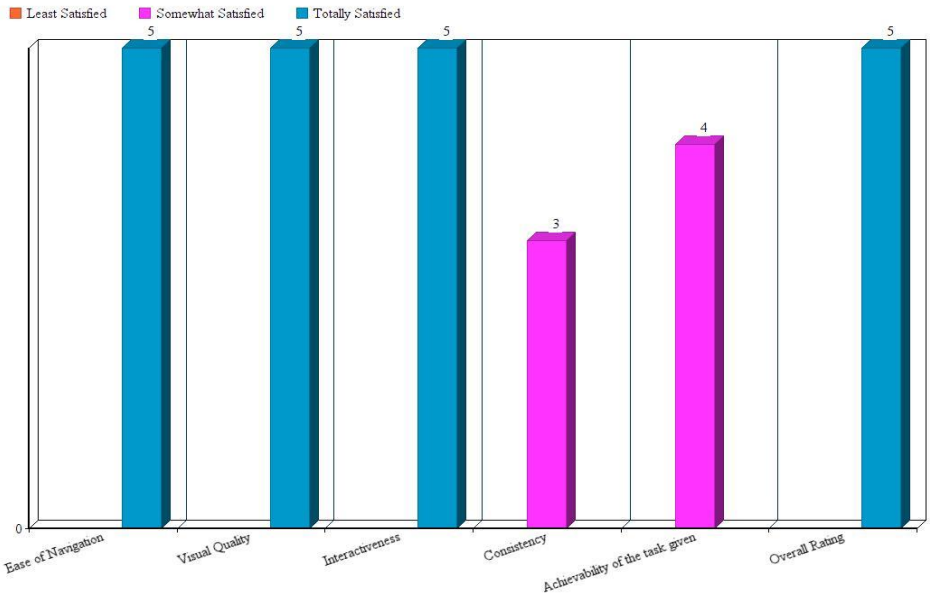
Survey Analysis:

We put the average results of the data collected in a tabular form to facilitate our developers to understand the survey more in-depth but faster.

Average satisfaction rating:

The below charted results represent the average rating given by five participants based on individual factors each defining a fundamental part of our app.

Task at Hand	Average Time Taken	Average Slips and Errors	Accomplishment Status	User Comments
Play the Trivial Game	5 minutes	None	100% Accomplished	No back button, No timer
Buy a mug from the merchandise store	6 minutes	1-3	80% Accomplished	No order tracking, No payment info
Read "Samwell Tarly's" theory	10 minutes	None	100% Accomplished	No subscription method to follow future theories
Navigate Freely	20 minutes	3-5	100% Accomplished	Needs visually better icons



Interpretation and Implications of results

Interpretation and Results from Analysis:

- One out of every five users had a problem to retrace their placed orders in the application and would like to have an order tracking option within the app.

- Two out of every five suggested that a timer option in the trivia would be great to quantify their own pace of playing the game.

- Some users were disappointed that they couldn't go back to a previous question page after answering it and suggested that a back button in the game is a must.

- Hundred percent of the participants felt that the navigation through the different sections of the application was easy as well as self-explanatory.

- Almost all the users found our application to be visually appealing but some users also commented that the menu icons could be improved.

- A participant resulted that an option to subscribe to fan theories will make it easier to follow future discussions.

- More payment options could be implemented for user convenience.

Implications and Modifications:

Based on the evaluation conducted following functionalities has been implemented in the application:

1. Timer Function - Timer function in the trivial game has been implemented to provide the users with an option to time their game and compare it with their friends.

2. Back Button - A back button in the trivial game has been implemented so that the users could go back and forth in the game and look at their answers again.

3. Visual Improvement – Icons and fonts have been improved to make them more self-explanatory, appealing and highly readable.

4. Subscribe – An option to subscribe to the fan theories has been implemented with features to follow the theories and receive updates if any modification or fan comment occurs.

5. Previous Orders - An option for users to see their previous and currently placed orders has been implemented so that users can retrace their orders for future references.

Future Enhancements:

Based on the evaluation, the development team suggested some ideas for the application which could be implemented in the future.

- Option to track the orders with their unique tracking code within the app.
- More payment options to make our app more trustworthy and versatile.
- Visual improvements in design and logic algorithms to make the user experience smoother.
- More indexed sections for purchasing merchandise.