



COS20001: User-Centered Design

5.1) Conceptual Design

Group 4

DESIGN SOLUTION

A room with ten people will contain eleven preferences, different people have different tastes in what they call aesthetics. Therefore, in order to meet the requirements of all various learners, teaching methods must be as diversified. Gone are the days of lecture-based learning, nowadays, the learning approach and mindset need to be tailored so would fit the ever-changing nature of global education. In this day and age, modern teaching tools are essential and desirable, and game-based learning is a teaching strategy for assisting students in meeting their learning objectives. As the demand for game-based platform increase, so does the number of applications that can provide educators with assistance to create a game for their students namely Quitch, Kahoot, Quizziz,... However, we believe that a game-based platform should be able to support educators in the long term, offer students a variety of personalization options and be cross-platform compatible to meet all the needs of educators and students alike. Therefore, the prominent features of our product are as follows:

- “Homepage” – The greeting page of our platform, the users will be welcomed with a variety of news, updates, and courses or quizzes created by other educators from prestigious educational institutions around the globe. There shall also be a search bar and navigation bar for users to navigate themselves effectively from the main page. Although the homepage of Quitch is quite good, from the data analyzed from the users, we strongly believe that Quitch’s navigation bar and overall user interface can be improved.
- “Content creation” – The backbone of our product is an effective, all-in-one built-in teacher portal that allows our educators to create courses, quizzes, and select existing lectures to create a revision for their students. Moreover, we thrive on providing the users with customization for their creations of courses and quizzes, video, audio, and set of images can now be added to the courses or quizzes to captivate their students. It is obvious that we keep the basic function of Quitch; however, our team’s ambition is to add some features that will help the educators in the long term and provide them with more tools to captivate the attention of the students.

- “Communication” – We understand that a solid connection between the educators and their students will result in a better performance from both sides. That is the reason why we aim at providing the users with a communication system that will be able to strengthen the communication between them. Apart from that, small-sized documentation can also be sent via a message system so as to offer the users a convenient method of exchanging small files. Quitch’s communication system is quite effective or rather too effective, the notification and announcement section is packed with words that may be overwhelming for the users. For that reason, our product shall have an option to reduce the number of words that appeared on one page, and at the same time, provide the teachers with a feature to send small documentation via the messenger system.
- “Profile and setting” – It is important to provide the user with the ability to customize their profile as well as the overall setting of their application. Understanding this, our team strives to provide our users with as much power to customize their profiles as possible. Moreover, the users’ account information can also be changed in this section. Quitch has done a great job in offering the user the ability to change the languages, username, and password; however, we really want to emphasize our platform’s ability to provide users with more power to customize their application, this will include the images, fonts, background picture, and themes.
- “Cross-platform compatibility” – Although Quitch has been proven to be an effective application in providing educators with tools to make their students entertained, Quitch’s major drawback is that it only supports mobile devices. For that reason, our team aims at making our product to be compatible across multiple platforms, including but not limited to mobile devices.

DESIGN SCENARIO

Bretoshni Liaman is an educator based in Hawthorne, Australia. She has 7 years of experience as a pedagogical practitioner and visiting lecturer in various universities across Australia. Liaman has been in the search for more

interesting and interactive teaching techniques to bring her closer to her learners, especially young learners like university students.

Bretoshni Liaman first heard about our product through our team's speech at a meeting for lecturers at the Swinburne University of Technology. Our application perfectly fits her needs of creating various quizzes that let her students get involved in competitions. She quickly signed up for our trial and immediately got the contract for the official license for our product.

Before Bretoshni used our application, she said: "I have always had difficulties with helping students to revise knowledge before exams. The only way to test students' knowledge is by conducting conventional exams that focus heavily on memorizing. The students respond negatively to this and eventually consider the purpose of learning is to get through exams but not to become more knowledgeable".

After engaging the use of our product in her teaching, Bretoshni has received positive feedback from her students. Bretoshni creates various quizzes using both available templates from our platform and her own imagination to help students revise their knowledge after every lesson. Moreover, she is now able to arrange courses with our team's help. The courses can contain the knowledge of the course and the practice quizzes for the student to practice at their own pace.

Moreover, with the feature to add video and podcast into courses created on our platform, Bretoshni has been able to upload her lecture recording to help the students more effectively, quizzes are also considerably more interesting as our product allow the educators to use video, audio, and images as a question.

The majority of the class has been surprised by the way this product changed their study behavior.

Nani (a first-year IT student at Swinburne): "I really enjoy taking part in the quizzes and competing with my classmates. I can revise my knowledge without trying to memorize pages of information. Personally, I particularly found the feedback section incredibly helpful. I am now able to see which part I am having problems with so that I can focus on it in my revision".

Brett (Nani's classmate): "Before Ms. Bretoshni introduced the application, my learning journey was simply surviving tests. This application provides an

interactive and fun way to learn that truly motivates me to deepen my understanding for my own sake, instead of just passing exams. Apart from that the modern yet minimalistic user interface and the ability to change the theme of this application is truly amazing."

Josh (Bretoshni's colleague): " I have heard of Ms. Bretoshni's new teaching method lately, at first, I thought that it was a normal application like any other game-based applications. However, with a variety of personalized options and the ability to be compatible across the various platforms, I was surprised by how effective it is. Now I can use this application with my international students without any trouble."

Previously, Bretoshni had problems with helping students revise knowledge and introducing more interesting teaching techniques. With the help of our product, both problems are entirely solved, and the classroom turns into an interactive and fun environment for everyone.

"Using this application allows me to focus on bringing more new knowledge to my students without having to worry that my classrooms will be boring. I am now able to spread the joy of learning to my learners, which is my ultimate purpose of becoming an educator" she said.

BRIEF SUMMARY

Overall, our product aims at giving the users more power to customize their working environment to their wishes, this, consequently, will improve the user experience. Our idea of personalization does not only stop at the user interface but also the functional requirements of the application, courses, and quizzes shall be diversified so as to allow the educators with more options and tools to support the students and at the same time entertain them. With the ability to add videos, and podcasts, and create a revision, we strongly believe that students will benefit greatly from our product in a long term. Moreover, our product can be used from many different devices, this will provide both the students and the teachers with the convenience to access our platform anywhere, at any time.

WIREFRAME

Homepage

Logo

Search Bar...

Home

Classes

Inbox

Tutorial

Create Quiz

Language

Join Game

PIN...

QR

Avatar

Login/Profile • Settings

News & Updates

<

Course Name

Course Name

Course Name

>

Course & Quizzes

<

Course Name

Course Name

Course Name

>

Figure 4. Homepage wireframe

Course Creation

Back

Save & Proceed

Course name

Course language

Cover Image

Course Description

Course Topic

Course Visibility

Figure 5.1. Course Creation wireframe

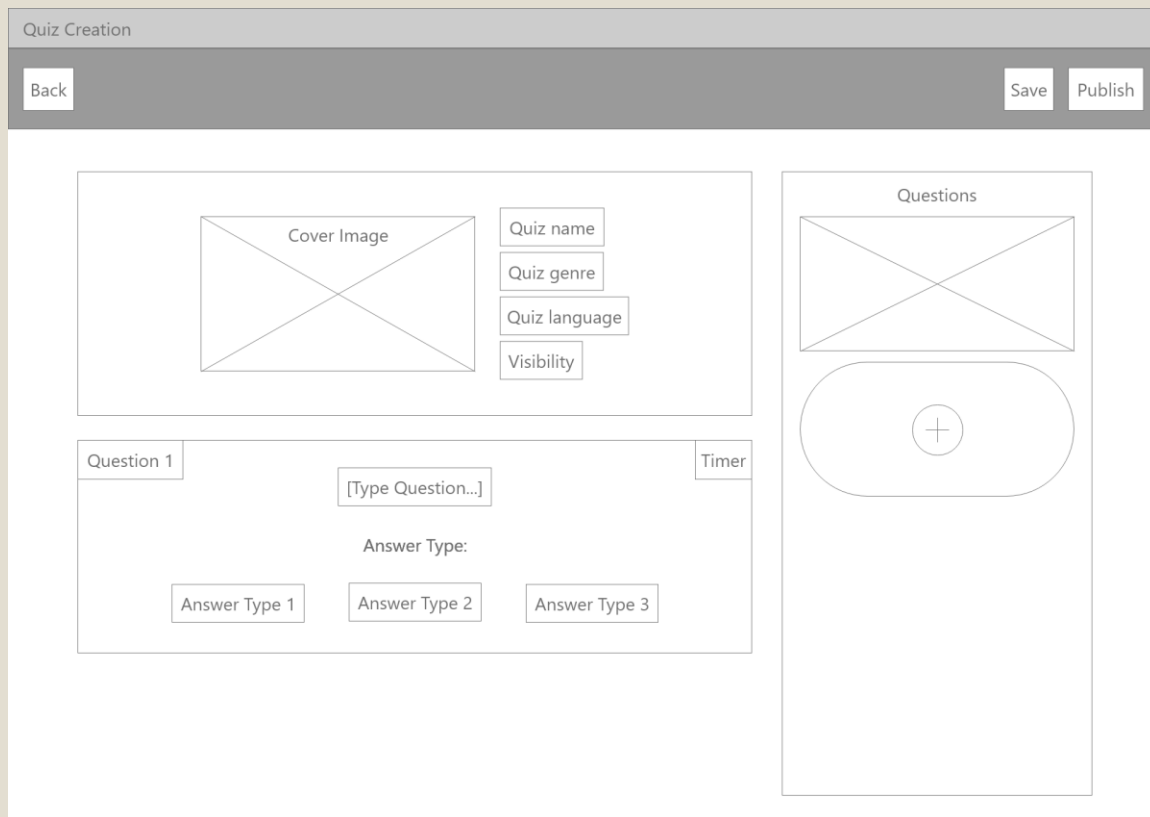


Figure 5.2. Quiz Creation wireframe

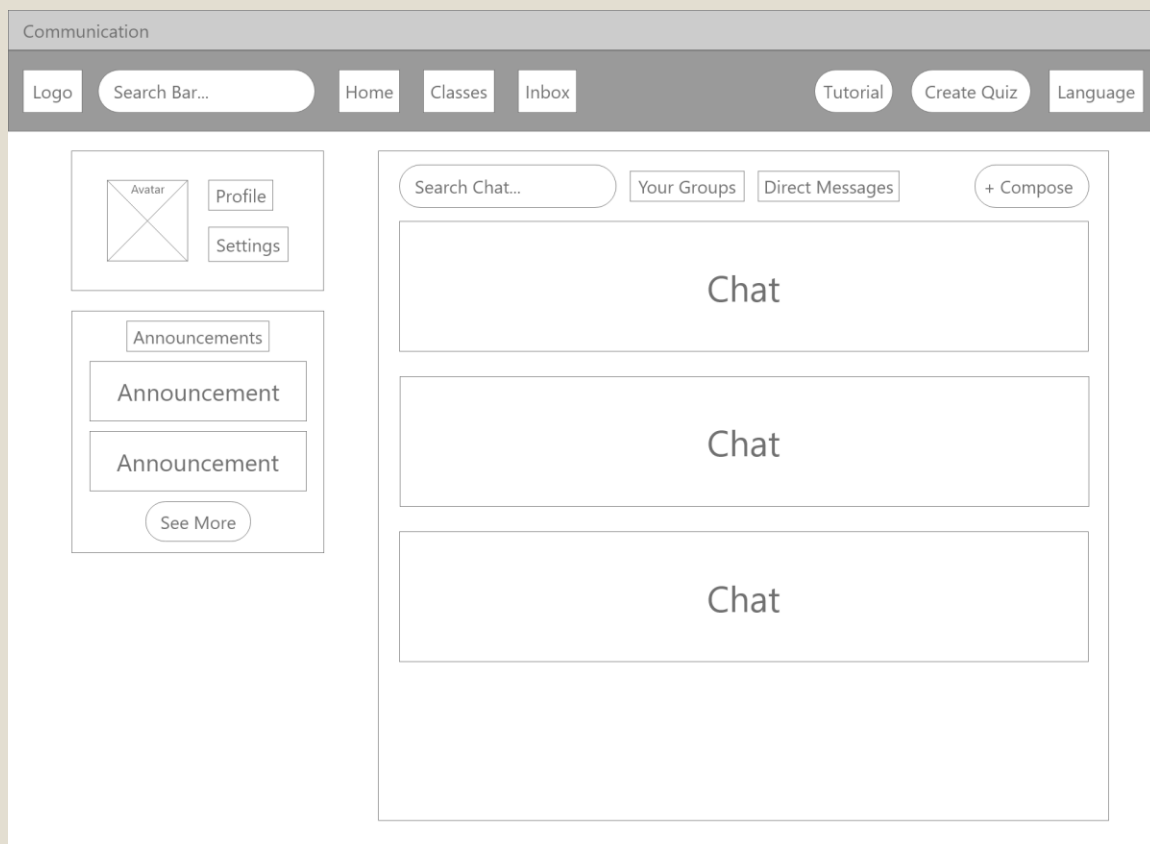


Figure 6. Communications wireframe

Settings

LogoSearch Bar...HomeClassesInboxTutorialCreate QuizLanguage

Account

Avatar

Setting 1:

Setting 2:

Save Changes

Personalize

Setting 3:

Setting 4:

Setting 5:

Setting 6:

Save Changes

Figure 7. Settings wireframe