

Reflective Design Notebook

By Group 24

Student Interview Process

Through general observation on how secondary school students around us study and our current experience as a university student, we initially assumed that are experiences would be similar.

However, when we interviewed them we realised that a lot of things changed such as the system they use for receiving tasks (gradual transition from askNLearn to student learning space) and the studying preference of students.

It was indeed an eye-opening experience for us and we were glad that we decided to choose a target audience that we were not part of so that our judgement and biases would not cloud the authenticity of the responses.

After conducting the interview on students, we completely modified our draft of students survey to include popular options as expressed by students in the survey and from the results, we realised that the general sentiment of students varies slightly from what the teachers think of students.

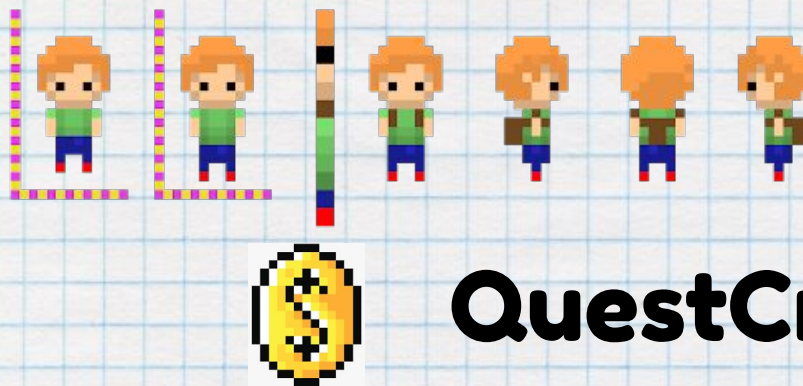
Teacher Interview Process

The teachers were surprisingly consistent on what they thought of the students' motivation level and what is expected of them. Hence, while they were able to understand the challenges students face when they are having self-studying sessions and most of their motivating factors, one result that we were surprised by was what the teacher considered as the least motivating factor for a student, which is "fear of failure", was in fact one of the most motivating factor for students.

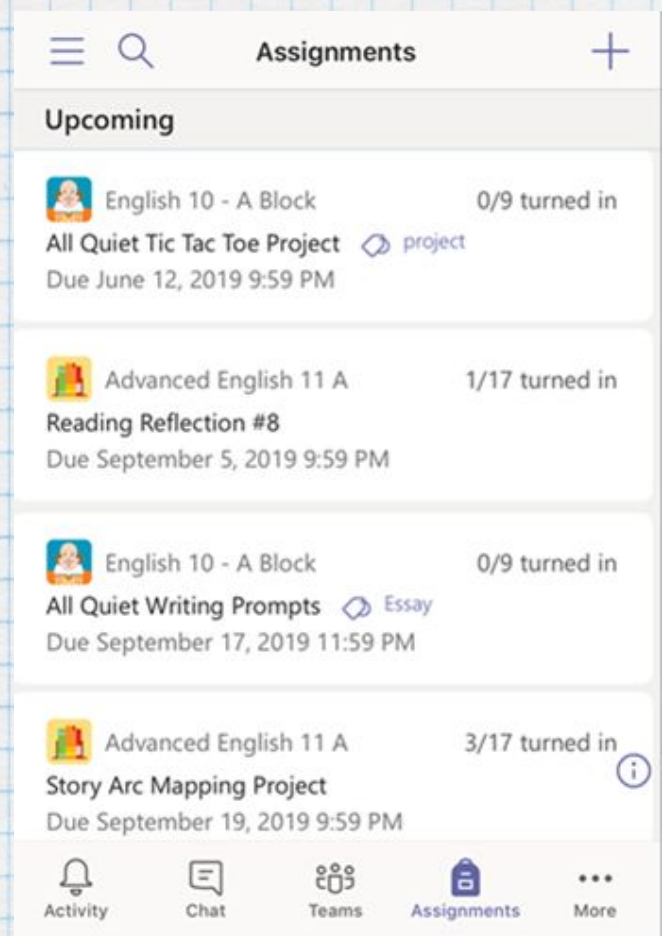
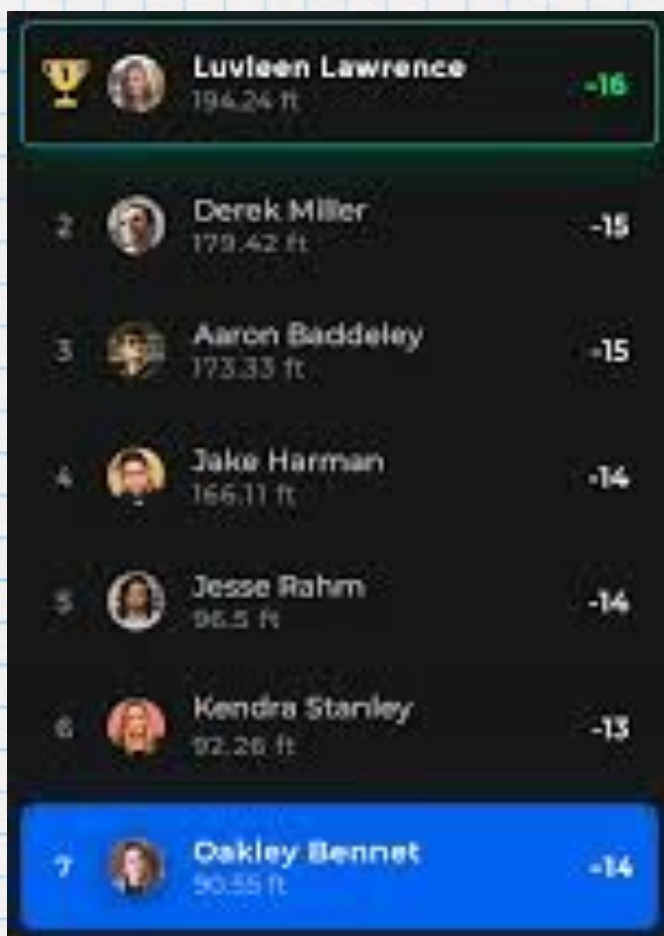
Prototype Considerations

- The design layout of QuestCrunch should be visually appealing to the students
- User interaction should not be too complicated for the teachers
- The study session should terminate when students leave the application
- The Quest and Bounty reward system should be interactive and motivating for students
- We should gamify the study process such that students can be encouraged to study more to unlock more features

Mood Board



QuestCrunch



Prototype v1 Design Process

Each of us were given the same list of functionality that needed to be supported (e.g. creation of class, starting a quest, etc...) and tasked to create our own prototype.

It was surprising to us how different each prototype came out to be. Some of us preferred a more minimalistic user interface that expressed gamification via small objects like coin icons, wanted posted, etc, whereas other members preferred the entire application to look like a game.

Prototype v2 Design Process

As our prototypes were similar in most of its functionalities and the way they were designed, the distinct differences we picked up were the colour scheme (professional vs gamified) and user flow (simple easy to use vs additional functionality to increase gamification). As we were unsure which design would be preferred by teachers and students, we decided to combine our four prototypes into 2 main ones so that the results from our expert evaluation will highlight which colour scheme and user flow is generally preferred.

Prototype v3 Design Process

From the feedback received from v2, we found out that although most of the evaluators found that the professional version of the application was easier to use, overall they still preferred the gamified version in terms due to its visual appeal.

We sought out to find a balance between professional and gamification so that we can create an application that is easy to use and still visually appealing.

We then came up with one prototype where both the teacher and student user flow is standardised and it has a professional layout with some gamified elements for students.

Prototype v4 Design Process

Using our prototype v3, we tested it with real users and found out that the main page was still rather visually overwhelming. Upon further testing with other users, we found out that the class label could be the cause of the cognitive strain, as it had a rather complex design. The class label had been inspired from the gamification aspect, but we realised that our application was meant to be an educational application and the label could be too complex for it.

Hence, we swapped the class label for a more simplified design for the final prototype. We also edited our format and sizing to be consistent throughout.