Quiz Qrafter

COSC 4P02 Release Planning

Member	Student Number	Role(s)
Jason Parsons	6586861	Scrum Master, Product Owner, Project Manager
Nikos Dritsakos	6995021	Full-Stack Developer
Gideon Oludeyi	7333586	Back-End Developer
Akshay Rash	6830236	Full-Stack Developer
Kelvin Odinamadu	7063571	Full-Stack Developer
Jingyi Ma	6897185	Full-Stack Developer
Luke Reinaerts	6955421	Back-End Developer

GitHub page: https://github.com/QuizQrafter/quiz-qrafter

In This Document

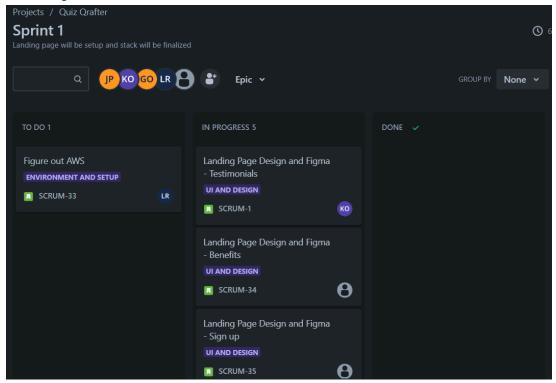
This document specifies Quiz Qrafters release planning process, including our planned sprints, user stories, and expected timelines. This document will also feature current and planned contributions as the project continues. This document does not include a description of the system, its purpose, or its justification, which can be found in the Project Proposal document instead.

This document will begin with an elaboration on our selected system for managing our sprints, timeline and user stories. Next, we will discuss the Agile process we intend to use. This will be followed by a detailed description of our planned sprints, including user stories and expected timelines. Lastly, there will be a brief section on various group member contributions and a conclusion.

Project Management System

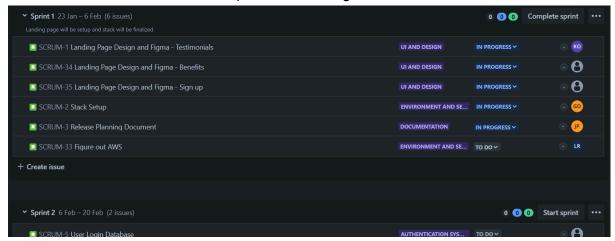
We have elected to use Jira as our project management system for Quiz Qrafters. Jira features integrations with Github, where we will be storing all documentation and code, and a well-defined and user-friendly backlog and timeline feature, as well as an Agile Board that will allow for efficient agile standup meetings.

In Jira we will be tracking our user stories as "Issues", with the ability to change their states from "To Do", to "In Progress" and finally, to "Done". There is also a commenting feature enabled for these issues, allowing us to update progress on specific stories when working on similar features in groups or pairs. This is best visualized through the previously mentioned Agile Board, as seen below:

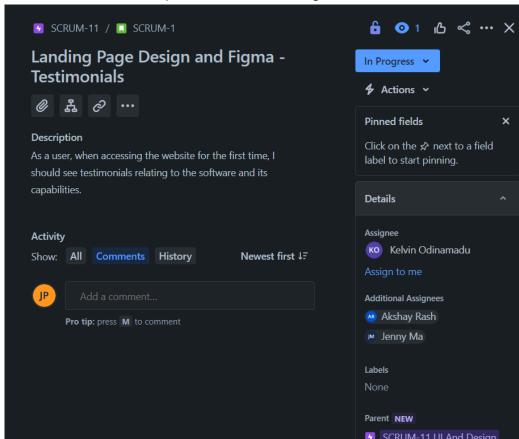


Agile Board in Jira

Jira also allows us to plan out our sprints, including the issues we plan to work on during each sprint. This is done using the Backlog feature, where we can create the issues and sprints, and assign issues to a sprint simply by clicking on an issue and dragging it into its appropriate sprint. Here we can also view detailed information on each story, such as its comments or who it has been assigned to. We also added an "Additional Assignee" item to the issues, to allow us to track multiple users working on the same feature.



Sprint viewed in "Backlog" in Jira

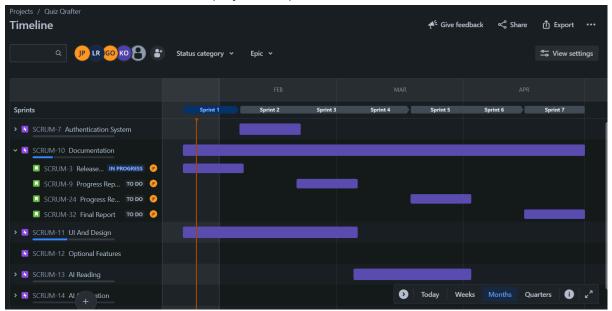


Detailed Issue page

As can be seen from the detailed issue page, Jira also allows us to organize our issues log into Epics, which can be visualized using the timeline feature. Epics allow us to better evaluate what types of skills may be needed for the issue, as well as which features

those issues will contribute towards. During sprint planning meetings this can be used to help break up the work between the individuals best suited for specific tasks.

These Epics define how the timeline is broken up, allowing us a clear idea of what features and other aspects will be important during each sprint. We can also drill down specific Epics to see which Issues will be handled in each sprint, giving us a clearer view for Epics that span multiple Sprints. The timeline feature will be helpful during sprint planning to ensure we are on-schedule to have the project completed on time.



Timeline view with "Documentation" Epic showing

Lastly, Jira also features the ability to create "Bugs" as an issue type, allowing us to track and manage bugs alongside stories, making it possible to include bugs that need to be handled in our sprint planning.

Agile Process

Quiz Qrafters will be making use of the Scrum methodology throughout our project. We will be tracking user Stories as Issues using Jira and we will be evaluating our current progress and any desired changes to the backlog regularly to keep up with evolving needs.

We have broken down the project timeline into 7 Sprints, each of which will be 2 weeks in duration. During these sprints, we will have a total of 4 group meetings, which will be held during the class time allotted for COSC 4P02.

The first meeting of every sprint, which will be the first Tuesday, will be our Sprint Planning meeting, where we will discuss the new sprint that is starting. We will also be using this time as our Sprint Retrospective, where we can go over the previous sprint to evaluate what worked and what did not. In these meetings, we will determine if any Issues from the previous sprint were left incomplete and will need to be brought into the new sprint, and we will evaluate the existing plan for the new sprint to ensure that we understand the expected output and that we believe there is an appropriate amount of progress being made towards our end product. This meeting will also serve as our opportunity to assign Issues during the

sprint, to ensure that at least 1 user is working on each feature so nothing gets missed by the end of the sprint.

The remaining 3 meetings will be our regular Agile Standup Meetings. These meetings will provide an opportunity for the team to talk about current progress, including any potential blockers that the rest of the team could help with, and we will be able to assess whether or not we will be able to complete the assigned tasks within the sprint, or if some tasks may need to be pushed back or re-organized. For this, we will be using the Agile Board available on Jira, allowing us to visualize current progress on Issues.

Planned Sprints

This section will feature a detailed breakdown of our currently planned sprints, including Issues and expected output by the end of the sprint.

Sprint 1



Sprint 1 will run from January 23rd - February 6th and features 6 issues that have been identified. These have been broken down and assigned to the different members of the team. The finalization and setup of the stack Issue has been assigned to our back-end focused team, and the idea of using AWS instead of Firebase has been brought up, so an Issue was created to track the members of the group researching its complexity and capabilities. That Issue will be a pre-requisite to finalizing the stack and is expected to be completed in the first half of the sprint. Meanwhile, this document is being created and is also expected to be completed in the first half of the sprint. It has been assigned to the Project Manager. The Front-End team will be working on the landing page throughout this sprint, which includes 3 Issues, the Testimonials section, the benefits section and the Sign-Up page.

By the completion of the sprint, there are 3 deliverables expected to be completed. The first is that the stack should be finalized and all required systems are available for use through the rest of the project. The second is this report, which will be handed in halfway through the sprint. The final deliverable is the landing page, which should be completed and functional, outside of having no working back—end features to support it.

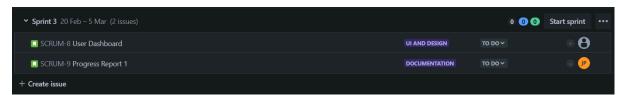
Sprint 2



Sprint 2 will run from February 6th to February 20th. This sprint only features 2 Issues currently, but these issues will be broken down into smaller issues and expanded upon during Sprint 2's Sprint Planning meeting.

Sprint 2 will feature only 1 deliverable at this time, which is a working log in and authentication system for Quiz Qrafter, accessed through the Sign-Up page completed in Sprint 1. This will also serve as our first usage of a database in this project, which will need to be setup for this sprint.

Sprint 3



Sprint 3 will run from February 20th to March 5th and will feature 2 Issues and deliverables. The first will be the User Dashboard, which will be the main page for logged-in users. This will feature the main functions of the software once implemented and will have features like the ability to log out or navigate to different features. These will be expanded upon during the Sprint Planning Meeting. The second deliverable will be the first Progress Report, which will be due during that sprint.

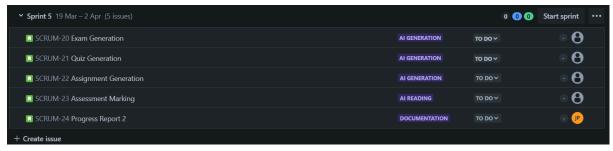
Sprint 4



Sprint 4 will run from March 5th to March 19th and will feature 1 major deliverable, that has already been broken down into 4 Issues and may require more when we reach the Sprint Planning phase for Sprint 4.

Sprint 4 will contain one of our major use case features for the software, which is the ability to scan and upload notes and assessment materials to Quiz Qrafter. This will be where Google Vision is implemented, to allow for document uploading and translation into text from either handwritten or otherwise undetectable formats. This will also be where document storage will become a factor, and it will be important that documents can only be viewed by the user who uploaded them.

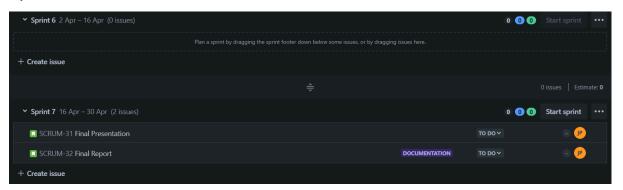
Sprint 5



Sprint 5 will run from March 19th to April 2nd, this sprint will feature the other major use case for the software; the ability to generate assessment materials. Additionally in this sprint, the second Progress Report will be created and handed in.

The deliverables for this sprint will be straightforward, the first will be the progress report, which will be created and handed in by our Project Manager, the second will be the generation of assessment materials feature. This will include the generation of sample exams, quizzes and assignments, following formats described from uploaded materials. Additionally, the assessment marking feature will be included in this sprint, allowing a user to upload a completed assessment that was generated, and receive a marked version of it telling them the correct answers to any that they got wrong.

Sprint 6 +7



Sprints 6 and 7 will run from April 2nd to April 30th. Currently, the only assigned Issues for these sprints are the Final Presentation and Report. The Report will be created by the Project Manager, while all team members will be present and have a role in the final Presentation.

These sprints have been left intentionally empty, as they will allow us a barrier in the event previous sprints have uncompleted Issues that get pushed back. If all Issues are completed on time, these sprints will be used to work on optional features, stored in the backlog until they have been selected for a sprint.

Backlog



The backlog contains any remaining features that may end up becoming a part of the final project, should time permit us to work on them. These features were all detailed in the Project Proposal, and will be broken down into more Stories should any of them be selected to be completed.

Contributions

Jason Parsons is the Project Manager (taking on both Product Owner and Scrum Master roles), and therefore was the creator of this Document, and will be creating all major documents for the duration of this project. In addition, Jason will be managing the Jira page, creating and expanding on the user stories as needed. Lastly, it will be Jason's responsibility to run and coordinate the Standup and Retrospective/Planning meetings. Jason may help in smaller ways with the technical side of the project but is primarily expected to work on documentation and management.

Nikos Dritsakos will be working as a full-stack developer on this project and will be involved in many of the major features, including document reading and creation. For Sprint 1, Nikos is helping to establish the stack, researching AWS and providing input on different available systems.

Gideon Oludeyi will be working primarily as a back-end developer on this project and will be involved in all back-end aspects of the project, including creating our GitHub repositories, configuring the AWS infrastructure, and working on various features. In Sprint 1, Gideon is helping with the establishment of the stack and will be researching AWS and contributing to conversations regarding different available systems.

Akshay Rash will be working as a full-stack developer throughout this project and will be involved in many different features, both front-end and back-end. For Sprint 1, Akshay is working with other full-stack team members on the landing page, including the Testimonials, Benefits and Sign-Up sections/pages.

Kelvin Odinamadu will be working as a full-stack developer during this project and will be involved in many features for both the front and back end. For Sprint 1, Kelvin is working with the other full-stack team members on the landing page components, such as Testimonials, Benefits, and the Sign-Up page. He will also be creating the setup to start the

frontend implementation while mentoring other members without Git experience, on setting up their development environment.

Jingyi Ma will be working as a full-stack developer for this project and will be working on many features on both front-end and back-end. For Sprint 1, Jingyi is working on the design of the landing and sign-up page components alongside the other full-stack members of the team, working on Testimonials, Benefits and the Sign-Up page.

Luke Reinaerts will be contributing primarily as a back-end developer for QuizQrafter. His role in Sprint one will include setting up the AWS environment along with the stack. Throughout the term he will be involved in creating and maintaining many of the features for QuizQrafter, and implementing them on the back-end.

Conclusion

Quiz Qrafter will be created throughout 7 2-week sprints using Jira to manage our user stories and sprints. The first few sprints will focus primarily on features like authentication and having a landing page, while the middle sprints will focus on the major features such as assessment reading and writing. The final 2 sprints will serve as a buffer should anything be incomplete by that time, however, we have a backlog of optional features we may try to include if the time allows for it using those otherwise empty sprints. The team has defined their roles and interests within the project and we will be using that to help break up the tasks between different team members. By the end of the 7 sprints, Quiz Qrafter will be a fully functioning tool usable by students to enhance their learning and education in ways not possible before. We are excited to begin working as Sprint 1 begins and we look forward to seeing Quiz Qrafter through to completion.