

# Swivel Careers' Questionnaire

## PROJECT PROPOSAL

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## Executive Summary



The current issue is that graduating from High School can be daunting as students are left with the question of 'what's next?' In this project, we will be creating a web application to provide information and recommendations to students to help them find careers they would thrive in. We believe in Swivel Careers' vision and think this will make an immensely successful project as there is a real demand to guide students towards suitable tertiary studies and career options.

We recognise the need for an interactive quiz that is highly engaging to students. In the form of a web application, it suits the target audience, students, as it would be familiar to them. The quiz will involve the students as they progress through the questions and make them more intrigued in finding what their future holds.



An important factor influencing career choices for students is career counselling that provides students with guidance and information. Swivel Careers provides these services to secondary and tertiary students already. However, not all students know about, ~~want~~ to directly access or have easy access to their services, hence a web application helps to reach a wider audience for Swivel Careers.

We are structuring our development to encourage continuous improvement and redesign through an AGILE system. Weekly meetings and strength-based task assignment will allow us to work efficiently and meet our goals.



## Background and Rationale

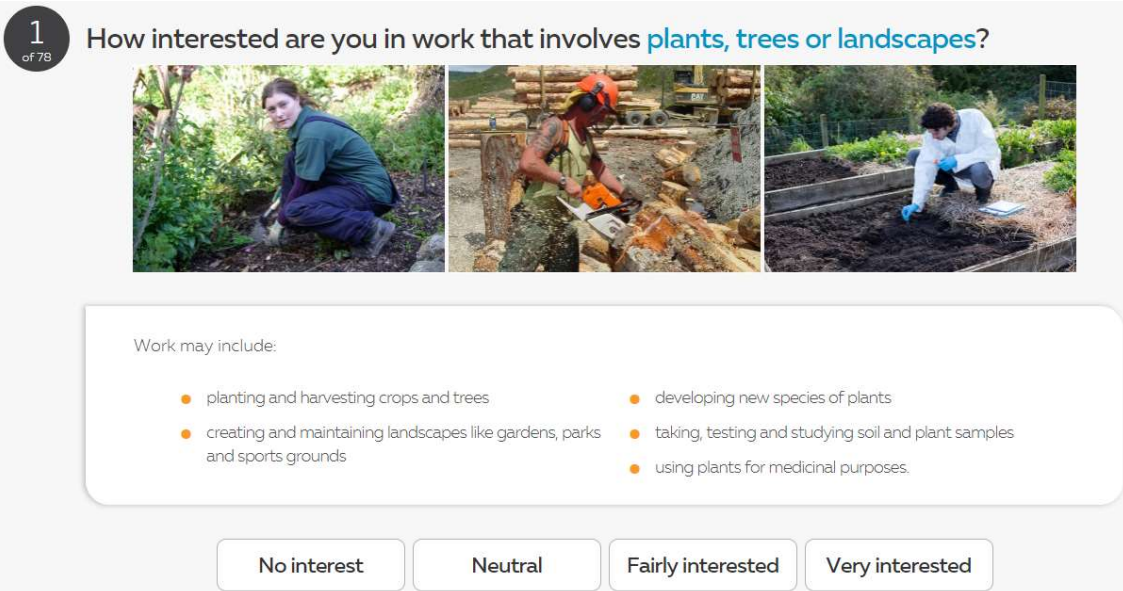
Graduating from High School can be daunting as students are left with the question of 'what's next?' In this project, we will be creating a web application to provide information and recommendations to students to help them find careers they would thrive in.

Swivel Careers is a coaching service that has already helped thousands of secondary and tertiary students in finding careers perfect for them. They guide students in a step-by-step process, which involves getting to know the student through conversational and psychometric assessments to understand their ambitions, values, strengths, passions, and interests. Additionally, they host workshops in schools on writing CVs, interview preparations, and the skills that would help students be successful in their careers. This process works for students who are willing to commit a significant amount of time and effort. However, a gateway that has a lower barrier to entry such as a quiz would be a much more effective and accessible way to help students and at the same time, informing and encouraging the students to try professional coaching provided by Swivel Careers.

Therefore, we have chosen to create a web application to ensure Swivel Career is able to provide guidance in a familiar and easily accessible way, as the majority of secondary [4] and tertiary [3] aged students in New Zealand have access and are accustomed to modern technologies such as the internet.

Although the internet provides a vast amount of information to students on various career choices, knowing where to start can still be problematic. Hence, the application will consist of a [questionnaire](#) provided by Swivel Careers. This application will give a better understanding to the students of their tendencies and traits, which will be utilised to provide students with a range of career options. There is also additional information for them to explore and to help them connect with the right coach.

After observing some typical New Zealand careers quizzes', for example, that of the NZ Careers website as shown in Figure 1 [1], we found them to be reasonably functional but lacking the kind of modern design elements that set cutting edge websites apart. Improving from this design to become more interactive will go a long way in encouraging the students to engage with the quiz on a deeper level.



1 of 78 How interested are you in work that involves [plants, trees or landscapes](#)?

Work may include:

- planting and harvesting crops and trees
- creating and maintaining landscapes like gardens, parks and sports grounds
- developing new species of plants
- taking, testing and studying soil and plant samples
- using plants for medicinal purposes.

No interest Neutral Fairly interested Very interested

Figure 1: The first question in the NZ careers quiz

## Specific Aims/Project Objectives



The overall goal of this project is to build a compelling and intuitive careers quiz platform for students.

Core functionality, as documented in our [Main Aims](#), must allow users to take the quiz, gain insights on their traits, tendencies and potential future pathways. Swivel Careers administrators must be able to access the data yielded by the quiz and observe selected visualisations.

Other possible functionalities, as documented in our [Supplementary Aims](#), could include payment options to access the quiz and integration with common student management software. Details on the exact form of these functionalities may be hard

to predict. They are time-dependent and are particularly susceptible to change based on how earlier aspects of the project take shape and client preferences due to how late they will occur in the production process.

## **Main Aims**

### **Goal 1: Functioning Quiz**

- Objective 1: Basic website structure and menu
- Objective 2: Quiz user differentiation and landing pages
- Objective 3: Quiz question modules
- Objective 4: Answer data processing
- Objective 5: Career recommendation page

This first step will culminate in a basic layout and page flow for the quiz. All future functionality will be built around this and it provides the perfect opportunity for the client to critique our general design structure as part of our AGILE workflow.

### **Goal 2: Interactive Quiz**

- Objective 1: Animated page and question transitions
- Objective 2: Embed pictures/videos to match questions
- Objective 3: Avatars

The User interface should ensure that users are able to intuitively navigate throughout the quiz while also remaining engaged by the information and options presented to them. To accomplish this, we will combine the raw functionality of existing quiz designs with a sleek, minimalist finish.

### **Goal 3: User Logins**

- Objective 1: User Interface
- Objective 2: Database storage of user login information

In order to ensure maximum utility and clarity for all types of users, the website will be compartmentalised into three distinct sections. These are the student section where students will take their quiz, the school section where representatives of schools will take their quiz and the admin section where Swivel Careers staff will be able to access quiz data and analytics. Differentiation between these areas and restrictions to user access will be achieved by having a unique login associated with each user which denotes their user type.

### **Goal 4: Data Collection/Analytics**

- Objective 1: Data collection and database storage
- Objective 2: Data processing/visualisation algorithms
- Objective 3: Admin analytics page

Initially, quiz answer data will just be used to generate career advice for students, but it serves as a dual-use case when collected en masse. The admin section will be expanded into an information hub providing insights on

students and schools. The data will be accessible in its raw form and as visualisations to ensure a balance of flexibility in usage and convenience.

### **Supplementary Aims**

#### **Goal 5: Payment Option**

- Objective 1: General checkout system
- Objective 2: Integrate checkout with the user accounts

Premium account types would gain access to additional functionalities provided by our web application. Different account types will be given the level of access accordingly.

#### **Goal 6: School System Integration**

- Objective 1: Integration management page
- Objective 2: Data send/receive options
- Objective 3: Live data flow between Swivel Careers and Kamar or Schoolbox Learning Management

Integration with commonly used student management systems to allow for better tracking of student preferences and added utility through analysis over time and data sharing.

## **Project Approach**

We will be using Hypertext Markup Language (HTML) for the core website. The components of the website will be further styled and designed in a similar fashion to Swivel Career's existing website design via Cascading Style Sheets (CSS). The website's functionalities such as the log-in, data-collection and the payment system will be implemented by JavaScript and in particular, we are making use of the ReactJS external library. The HubSpot integration could require ReactJS and their own specific language, HubL.

Our project management methodology is the AGILE KANBAN approach as web development suits incremental improvement and regular reassessments. We aim to report back to the team at Swivel Careers and HubSpot on a weekly basis where we can exchange ideas and change our plan accordingly. The project entails a lot of extensions to the core website that we could implement depending on how quickly we implement the core functionality and how they interact with other parts of the design.

All the members play an important role in the development of the website in terms of functionality, design and testing. As a team, we have agreed to have three people coding on two parts of the website and two other people who will be testing the functionality, performance and behaviour of the website. The outcomes of the testing and new additions to the website will be discussed amongst the team. The coding and testing role can be interchanged at any time when appropriate based on our strengths.

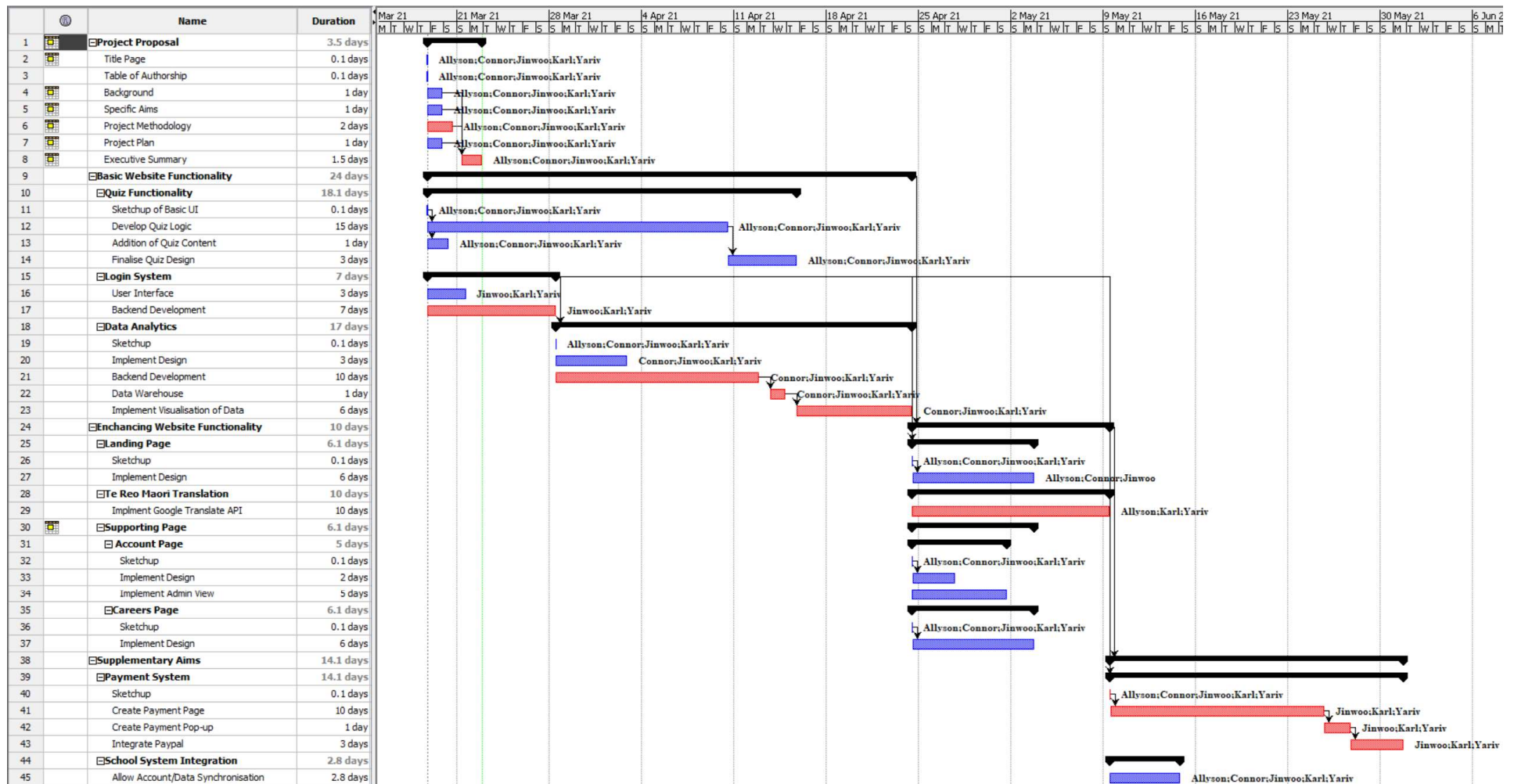
Our biggest challenge is the time constraint of a single semester. There are many extensions and improvements we can make for the questionnaire, but we are unsure of how many we can implement before the deadline. Only one of our members has prior experience with ReactJS and we'll all be learning how to code with HubL from scratch. We have no current solution on how to implement the integrations as we have yet to meet with Kamar, SchoolBox and HubSpot. We need to understand what the integrations involve before we can envision our solution.

We have plans for designing the login system, but we will have to perform essential testing to ensure that the system and local data are secure before we can take its functionality online.

We have experience with processing data and displaying a variety of analytics, but performance can be an issue as the data collected becomes excessive for the server host to handle. We may need to find ways to improve our functions that processes and displays such data and insights when performance becomes an issue.

By the end of our project, we aim to provide Swivel Careers with a questionnaire that is interactive, interesting and accessible for the students and individuals that will be using their service. Ultimately, our objective is to ensure the users of the questionnaire discover their career options and corresponding tertiary studies that will be decided by their strengths and interests.


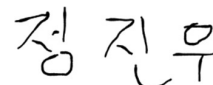



# Project Plan





## Table of Authorship

Section	Authors
Title Page	Allyson; Connor; Jinwoo; Karl; Yariv
Executive Summary	Allyson; Connor; Jinwoo; Karl; Yariv
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