This is a page outlining the main users and stakeholders of the Flashcard app.

System Stakeholders

Our Software project will be aimed towards those who are studying for the SJT examination, so medical students nearing the end of their medicine undergrad studies. The idea being that they will opt to download and use the application rather than paying a substantial amount for a one day, or several days course. That being said, there will be other system stakeholders who will play a role in the production of our application.

<u>Client</u> – William is the client for this application. He is a final year medical student who has already completed the SJT with a high grade and knows how to effectively study for this examination. He wishes to develop an application that will serve as a study aide for medical students preparing for the SJT. He has outlined the main project requirements and goals for this app and hopes to eventually be able to sell this to other medical students in the future.

Medical Students:

- Oscar An 18-year-old student who is beginning their medical undergrad degree. He is
 preparing well ahead of time in hopes that he passes the test in flying colours when it comes
 to the time of taking the test later on. He is technologically literate in the use of applications
 as he has previous experience with other similar apps, such as Quizlet, or any other app as
 the interaction should be fairly similar to widely used apps in general (Material design
 methodology).
- Sabrina Sabrina is a 22-year-old medical student who is preparing for the SJT, as she has to complete the test within the next year. She has done some practice concerning the test, but has been disheartened with other methods, such as rote learning (learning items linearly), and is apprehensive about investing into a day-course to prepare her for the exam, due to trust or budget issues. She has the same technological literacy as Oscar.
- Jacob Jacob is a 23-year-old medical student retaking the SJT. Because he is on a shorter time frame, he wishes to maximise the amount of content learned within his deadline. Rote learning would not help in this case and knows that using the methods of active recall and spaced repetition that this app provides will be beneficial in his scenario.

<u>Educators</u> - Another example of a stakeholder would be an educator, such as a tutor for a medical student, or a professor who may assign tasks as homework to medical students on the app (not necessarily directly on the app but may for example tell the students to cover a certain subsection of the dictionary such as the brain). This may involve the school of study purchasing a department licence for the app, or maybe it would be onto the user to optionally download the app, and the educators would suggest the app as an optional form of revision.

<u>Post-SJT Doctors</u> - People may have already passed the SJT but would like to ensure that their knowledge of the morals and ethics of a doctor is still sharp, for example junior doctors and possibly even practicing doctors, however this will likely take up a significantly smaller proportion of all users.

This one may not be as likely as it might be assumed that the person already has the sufficient knowledge of the codes and ethics of a doctor, so there would be no reason for an already practicing doctor to require this. On the other hand, if they had already purchased the app while they were studying for the SJT, it is reasonable they may want to brush up on their knowledge now.

User Stories

He we have given the key user stories for each of the potential stakeholders.

As the client (William):

- I have already completed the SJT, so I wish to be able to see the information that I have provided that the users of the app can see all the information needed.
- I hope to produce an app that can assist medical student in the preparation for the SJT, so I would like for active recall and spaced repetition to be implemented.
- I would like the user interface to be friendly to users, so new customers are not dissuaded from using the app.

As a first-year medical student (Oscar):

- I will not do the SJT for several years now, but I would like to know what type of content will be on it
- I would like to have an information page on the app so I can learn more about the SJT
- I may change my device before I do the SJT, so I would like to have a user account which I can use to access my progress and information on a different device in the future.

As a student about to the do the SJT (Sabrina):

- I want all the information I need to study for the SJT to be readily available on the app.
- I know the majority of the content, but there are some areas which I still find tricky. It would benefit me if I could revise these sections only.
- Testing my knowledge is vital, so I need to have an option where I can do sample questions from the SJT and see if I am correct.

As someone retaking the SJT (Jacob):

- I prefer to plan out my days in advance, so having the option to set the exam time and having a calendar prepared full of events would be very useful.
- I would like for my day of learning to be curated to the topics which I need to learn for that day, so I am not wasting time studying content I already know.

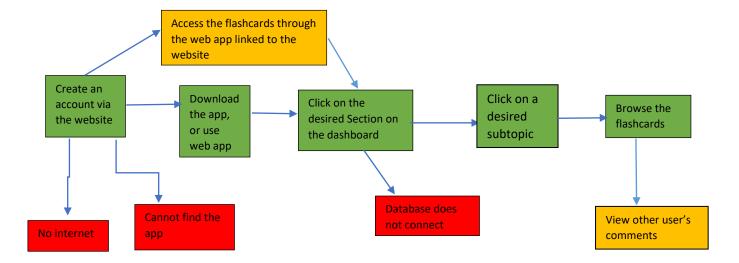
 Sometimes I use my phone to revise, other times I am at my desk. If I can switch between a mobile version and a desktop version, with my progress saved, I can maximise the amount of content covered.

As an educator:

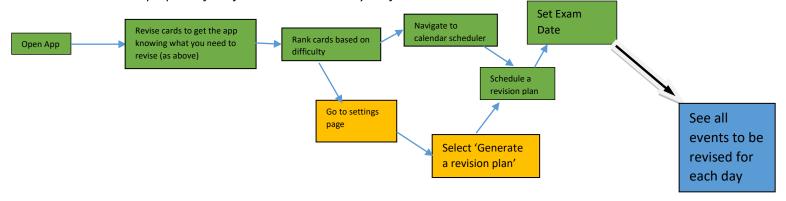
- I oversee many medical students who will at some point complete the SJT. I have heard from my co-workers that this app has shown good results with their students, but I would like to see a demonstration of how this app operates.
- I would like to tell my students to cover a specific subsection of the SJT, so I need to easily find this and tell them to revise it.
- I want to make sure there is no false information present on this app, so a resource page, or link for the flashcards would be useful.

These diagrams lay out the basic, alternative and exceptional flow of some of the user stories.

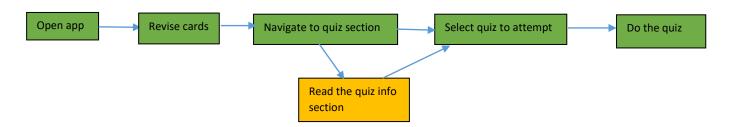
"I want all the information I need to study for the SJT to be readily available on the app." - Sabrina



"I prefer to plan out my days in advance, so having the option to set the exam time and having a calendar prepared full of events would be very useful." - Jacob



"Testing my knowledge is vital, so I need to have an option where I can do sample questions from the SJT and see if I am correct." - Sabrina



User Requirements

The most pertinent user story that we had hypothesised was 'I want all the information I need to study for the SJT to be readily available on the app', as well as '"I prefer to plan out my days in advance, so having the option to set the exam time and having a calendar prepared full of events would be very useful' coming in second. This is because our app is predominantly a flashcard application for students to revise for the SJT, however, we have the flexibility for the application to become a fully fleshed out study guide application.

Here is a more detailed analysis of the different 'flows' that a user may undertake.

Basic Flow:

- 1 Create an account via the website
 - 1.1 User accesses either the website or the application.
 - 1.2 They create an account

- 1.3 -Logging in is handled by the Firebase database, so now they have an account they can access from anywhere.
- 2- Download the app
 - 2.1 Download the application onto their device
 - 2.2 Log in
- 3 Click on the desired section on the dashboard
- 3.1 The user is presented initially with a simplistic layout of all the sections of cards that they can then access
 - 3.2 The user can select a topic of their choice.
- 4 Click on a desired subtopic
- 4.1 Once chosen a topic, the user has the choice to select any number of subtopics presented to them.
- 5 Browse the flashcards
 - 5.1 The application dynamically generates a list of cards, from the chosen subtopics.
 - 5.2 The user revises a card, guessing the answer based on the question presented to them.
 - 5.3 User taps the card to flip it over
 - 5.4 User rates the card based on how hard they found it.
 - 5.5 If hard, it is seen more frequently, if not hard, it is seen less frequently in the future

Alternative flow:

- 2 Access the flashcards through the web application
 - 2.1 User views the cards directly on the web app, not through their phone
 - 2.2 Back to basic flow 3.
- 6- View the other user's comments
 - 6.1 Users are able to comment on the individual cards
 - 6.2 They can say how hard they found it, and other thoughts concerning the card.

Exceptional Flow

1- No internet

- 1.1- User must check internet connectivity, or in the worst-case scenario, this is a problem with the database. More specifically Google Firebase
- 1 Cannot find the app
 - 1.1 The user is unable to find the app
 - 1.2 They get another user to send them a link directly.
- 3 Database doesn't connect This is a problem with firebase
 - 3.2. User either tries again later or asks support.