1. **Title**: Name of the application + a short catchy phrase (descriptive)

Working Title: StudentAide

Catchy Phrase: Connect, Learn, Excel

1. **Contact**: Project manager’s name and email

Richard Swann

rswann@sfu.ca

1. **Proposal idea**: Description of the idea in no more than 5-7 sentences

Studying tool

Assumption not studying on phone, studying using computer

- Tracks location (why mobile), use gyroscope to check how phone is oriented to check that student is not viewing the phone(if screen is upside down and not moving)

- Quizzes sent by the prof (wifi, analysis, display)

- Student info (data input, sql)

o User sign in on start up

* Pomodoro technique of studying implemented using a countdown timer -- user inputted length of time
* Allow users to track time studied for individual courses/subjects and total time studied (data analysis and display)
* Set daily/weekly/monthly study hour goals and track your progress towards those goals
* Encourage students to stay focused when studying because individuals sometimes find it difficult to study continuously in a comfortable home environment
* For the mini-tests could we use AI to interpret free text answers. A free text answer is generally a better measure of knowledge than multiple choice. If the instructions were to answer in your own words we could also detect who was quoting things verbatim from the text without necessarily understanding the material (probably a bridge too far).
* *Learning during the extended Covid-19 emergency has been dramatically altered by physical distancing restrictions. At university the proven techniques of study groups and using academic facilities to provide a work environment distinct from a home environment are not available. Additionally in high school settings online classes limit teachers ability to assess and support individual students who are not actively participating.*
* *The project goal is to provide a phone-based tool to help students set goals and organize their study time effectively to meet those goals. In settings where the course leader actively monitors and guides student progress the application will support frequent evaluations to allow the course leader to intervene as required. During planned study times the application will also use the phone sensors to attempt to detect activities that are inconsistent with studying.*
* *While not within the scope of the initial project, enhancements could be made to support multi-student collaboration and progress assessment using AI techniques.*

1. **Objectives**: What do you want to achieve with your idea?

* Improve student concentration
* Improve information retention and comprehension
* Allows students to actively track their progress over time
* Connect students with their peers or other individuals within the same subject
* Allow teachers to have data that can be used to provide the necessary help to individuals who may be struggling

With this application we hope to provide a way for teachers to actively track student progress. Currently it is difficult for teachers to monitor how well students follow the material due to the class not being physically present in a room. The app will allow teachers to view what percentage of time a student is spending on studying, and what percentage of time a student is distracted by their phone. We also aim for the students to be able to better manage their time, as some may find it difficult to focus on studying while they are at home. Teachers, meanwhile, will be able to use this application to see which students have trouble studying, or spend an unusual amount of time studying, and can provide these students with additional help.

1. **Results**: What results will come out of your project?

* Assist students to manage their study time more effectively.
* Enable course leaders to continually assess individual students’ level of comprehension
* Provide real time feedback (on comprehension, study habits, feedback on what ?)

By using StudentAide, students/users will be able to set real goals that they wish to accomplish throughout the period of their course whether it be for a specific subject or for overall studying, whilst being able to set smaller daily/weekly/monthly milestones of uninterrupted study time. The resulting data that is compiled by our application will be used by the Course Leader to help them better understand how an individual is performing outside of the classroom as well as continually assess the User’s level of comprehension of the materials. The data that is logged will also be able to help the User understand what courses they may not be spending enough time studying for and allow them to adjust how their time is being allocated. This project will ultimately positively impact the Users productivity and overall learning experience during these difficult and new times for students and provide the Course Leaders with information that could be crucial in providing assistance for struggling students.

1. **Users**: Who can and will use the application?

* Students and teachers

1. **References** (if any and do not count towards the page limit.)