Master Project Development Plan

**Sprint 0:** The team will focus the first efforts into learning how web application development works. Alongside, development of the idea and its shaping will happen. The team is to first evaluated which technologies are best suited for the project selected and then begin setup and adaptation to working environment. As every first part of a project, this involves a lot of researching, analysis and documentation. This presents first milestone for the project: to have selected a working environment, have it set up and a project idea is to already be in motion

**Sprint 1:** The team shall then began researching connection between server-side and client-side applying REST API. Working environment is to already be set up at this point. To say more, technologies to use are Python’s Flask, Angular 2, MySQL and any other deemed necessary during the way. At this part, the team will center into interconnecting mentioned technologies such that at least Flask and MySQL are already working together. We foresee at this point, Flask should already be able to create an instance in the DBMS running in the cloud (local if cloud connection is not achieved) with the function which lets students be inserted into the Database running. Thus, high-level milestone to be achieve at this point is: working Flask and MySQL connection with one function implemented.

**Sprint 2:** During this step, the team plans to have a solid working connection between Angular, Flask and MySQL. Namely, the team shall direct its full attention to REST API development. This to be able to implement functions eventually without encountering errors in connections, server, calls or any related issue. Therefore, high-level milestone is to have a working web application even if its functionality is almost none.

**Sprint 3:** At this point, the team should be hands on into implementing the core of the projects idea. Say, all functionality is to be developed and implemented in this cycle. All functions are expected to be working at this point, but it is open to maybe let a few for next sprint. Plans stand at first using relational algebra to develop the functions and, once known to work as expected, to implement them. Since past sprints were dedicated to set up and connection, this function, as implemented, should be readily available in the client side. Thus, high-level milestone is: develop and implement core project functionality.

**Sprint 4:** It is not hard to see last sprints seem ambitious. It is done because during this cycle the team expects to test and debug the whole application. We expect to encounter a few downsides on the system and to be able to correct them by testing and debugging functionality with enough time to correct any fault, and, if time permits, modify clients-side to have a better front-end. This is to say that high-level milestone here stands at: test and debug application to ensure efficient functionality.

**Sprint 5:** As expected, at this last sprint, the project should be completed to a 100%, tested, debugged and up and running in a cloud. This last part is left open as to if any of the sprints gets delayed, be able to use this space to gain back lost time.