

Software Engineering Research Project | 2020 Group 9

Weekly Report S1W8

What have I done for the project this week individually?

During the past week I spent time further investigating the technologies to be used in our first population model. This included standard python, SimPy and Matplotlib. These concern the simulation environment, allow us to progress time iteratively and also produce nice looking visuals from the model output. I also read through some general guides on theoretical design and technical implementation of models in python, and practised with some examples to gain a clearer idea of how they work in practice.

I also met with our client via a Zoom meeting to discuss and clarify some of our written communications during the week, pertaining to our understanding of data farming and the use of DoE within the project. Through these communications, and recognitions of some difficulties, we re-adjusted our plans on where we intend to employ these techniques within the imminent stages of the project. These conversations also gave me a better idea of how we would use these techniques in the later stages of the project, and thus gave me a basis of knowledge to prepare and updated an explanation for the remaining client group in the coming scheduled meeting.

Additionally, I conducted research in to some concepts relating to population, including the way the ABS calculates estimates and classifies certain data, which will be relevant to our population and disease models. Further, I also created an input/output diagram of the population model along with Basil, to be provided to Matt D. (client), with the aim of assisting us in using DoE to test these variables.

I also began compiling a collection of information to publish to the GitHub wiki including revised information taken from our proposal feedback, a glossary of terms and some links to various technologies and techniques utilised in the project with information on setup.

What do I plan to do for the project next week individually?

During the coming week I intend to finalise some of the activities mentioned above as well as the deliverables our team has specified and communicated to the client, ahead of the next scheduled meeting. Associated with this will be preparing an agenda of these items and some accompanying slides to deliver our work and revised decisions.

List the issues you encountered and give some reasons if applicable...

There were no serious difficulties encountered this week specifically. There has been some apprehension within the team to start with the practical implementation of the first model, however I believe this will be overcome as we work on it collaboratively and begin to build a base from our designs.