

# Software Engineering Research Project | 2020 Group 9

## Weekly Report S1W9

### What have I done for the project this week individually?

This week I assisted Josh in developing the first iteration of our population model, which would be our prototype for the client meeting during this week. We implemented a basic iterative model which took the data I curated from ABS, according to our input/output model, and calculated annual population. My particular involvement in the implementation was to do with parsing the CSV files in their given format and saving them into a usable data structure in the program. Furthermore, I pair programmed with Josh (online) for the majority of the other functionality, and assisted in debugging and fixing issues.

Associated with implementing the first stage of the model was some additional research into the availability of data and attaining it in the appropriate format. I also spent some time investigating the ABS.stat builder tool.

I also began publishing some of the content I had created for the GitHub wiki. Additionally, I contributed to developing the agenda and presentation content for this week's client meeting.

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

During the next week I plan to contribute to the further development of the population model, expanding its capability to produce a prediction for population beyond our truth data. I expect to also revise the implementation of the current code to better suit the flexibility of involving additional parameters and data.

I will also conduct some further research into improvements of the population model, as well as being to devise an input/output model for the COVID-19 model which is the next planned step of our development plan. I would like to discuss these matters and report progress to Andy in an informal meeting later in the coming week.

I will also continue to expand the wiki pages.

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

One difficulty I faced during the implementation of the population model was related to understanding the data e.g. its availability for certain years, the meaning of different measures and terms. Though we did investigate this previously in our proposal report, the implementation has made it clear that a more detailed and accessible reference be compiled for this, potentially available as a wiki page.