Next up, we’ll discuss about the codes used for the shinyapp server

We will assign a function to the server, which will be read by the shinyapp to operate the application itself.

We have included ‘session’ as a parameter in the function, which is an environment that can be used to access information and functionality relating to the session. In this case for example, we have used the session to update the choices in selectinput in one of our server codes.

First we have the codes for the interactive map: they can choose schools from the dropdown list as specified in the UI previously. The user input is sent to the server and how it works is that leaflet will return a map which is referred to by ‘outputmap’ and this will then add markers and a pop-up to the leaflet map corresponding to the location of the school that they have chosen.

On the same page as the interactive map, there is also the observeEvent function which relates to the input button “Bring me to my current location” which reads the current location of the user based on the javascript code specified previously and it then zooms in to their location on the leaflet map.

Secondly we have the codes for the personaliser: depends on what the user has input for the PSLE score and region in which they stay. Firstly we are cleaning up the data for the PSLE dataset first. The input for the gender, PSLE and PSLE score will render a table of which schools they are eligible for.

Next we also have the Wordcloud for the CCAs and subjects. Whatever kind of wordcloud that is going to be generated depends on what the user has input for the frequency and number of words using the sliderinput.

Then we also have the GGplots for various data visualisation that is both static and interactive. For the static data, we have included them in the various tabs as is to display the top 5 CCAs, top 5 subjects and top 5 schools for their cutoff points as is. For the interactive charts, depending on what they have input for their preferred subject, CCA etc, it will render a plot on the same page according to their specifications.

In conclusion, Star Track brings about much convenience for students and parents who are expecting to enter Secondary Schools but do not have access to an integrated comparing tool for the different secondary schools as there currently is no app that provides an integrated view for comparing between different schools.

With the design of Star Track, we are able to bind necessary information required to decide on a suitable secondary school for prospective students and kiasu parents alike.