CREATING A MENTAL MODEL

Name: Satvarsh Gondala
Reg no: 18BCE2098

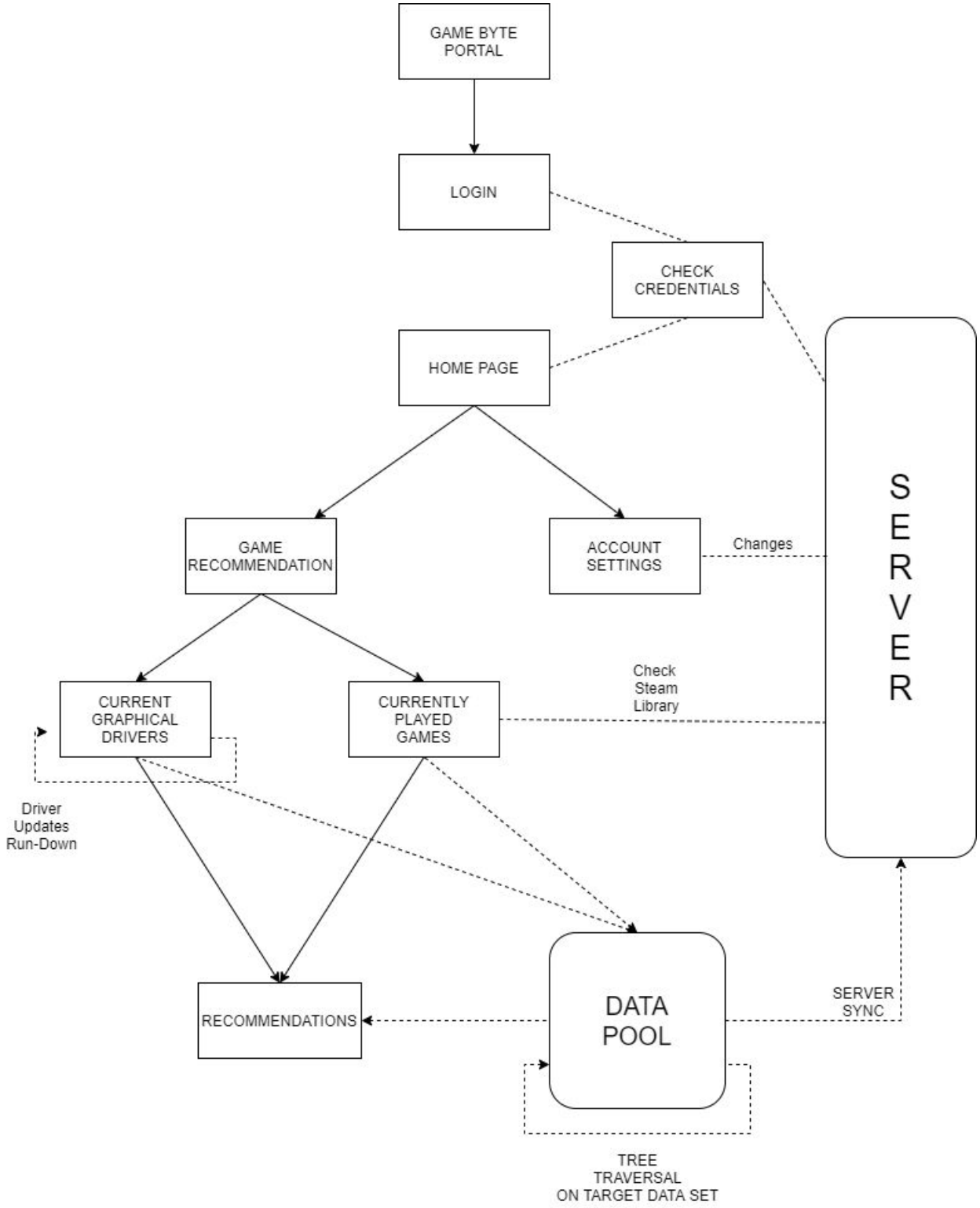
The following assignment is on creating a mental model.

Things to know before you look at the model:

- All solid lines represent active changes that user can see(Frontend)
- All dotted lines represent passive changes that happen in Backend
- Each rectangle/square box represents a state
- Each rounded box represents an entity
- Actions that take place within a state is shown with self loop

The following is a mental model concerning “GameByte”, a platform made specifically for gamers. I got this idea at a hackathon first, so here is my method of implementation for this. Every user will login directly from their “Steam”(Very Big Digital Store) account. This platform can recommend what game a user will like next based on their previously played games and also recommend what graphic, computer drivers/components will the user need in future based on the recommended games that the user might play/have in their wishlist. Most actions are described in depth following the diagram.

GAME BYTE : MENTAL DIAGRAM



A portal is it’s own page. There is no need to register, because registrations happen on the Steam Website.

- Every time a user logins the website will check the credentials to see if they match with the server.
- From home page user can go to Recommendations, Settings
- Changes made to settings will update the existing settings in servers
- Upon entering Recommendations the website will check for:

    - Current Graphics Drivers(Via WMI module in python)(A)
    - Current played games (Via steam website)(B)

- Both of A,B data is sent to a Data Pool where tree traversal is used to find the most optimal solution for the user. It also syncs data at regular intervals with the servers and uses that data to further optimize other user's recommendations.
- The final data consisting of:
    - Future Games
    - Future Drivers
    - Future GPUs

List of references:

Python code to use WMI module:
https://stackoverflow.com/questions/28724322/detect-graphics-driver-information-in-python

Steam Website:
https://store.steampowered.com/

Tree Traversal for optimizing user preference:
https://www.javaworld.com/article/2075565/sir--what-is-your-preference-.html