Software Architecture

The architecture of build one uses the model view controller architecture. Figure 1 shows a high level domain model which we followed as best we can during the implementation process. The CLI and GUI (to be implemented) classes represent the views which route requests to the controller. The controller calls the appropriate model, in this case File IO, Game or Log model (to be implemented). The Game model is responsible for initializing and starting the game. The Game initiates by creating the Bank class, Player class and the four Decks required. The decks inherit from a Deck class and take a card as a type. Each card holds properties specific to that cards purpose. As an exampe, City Card holds all information relevant to that area on the board, including neighbours, building costs, number of minions on the spot, if there is a building, etc. The Player and Card types all contain functions that allow a game to be carried out, such as decreaseMinions(), setBuildings() etc. The Deck holds a stack of the Cards and acts on this stack as necessary.

