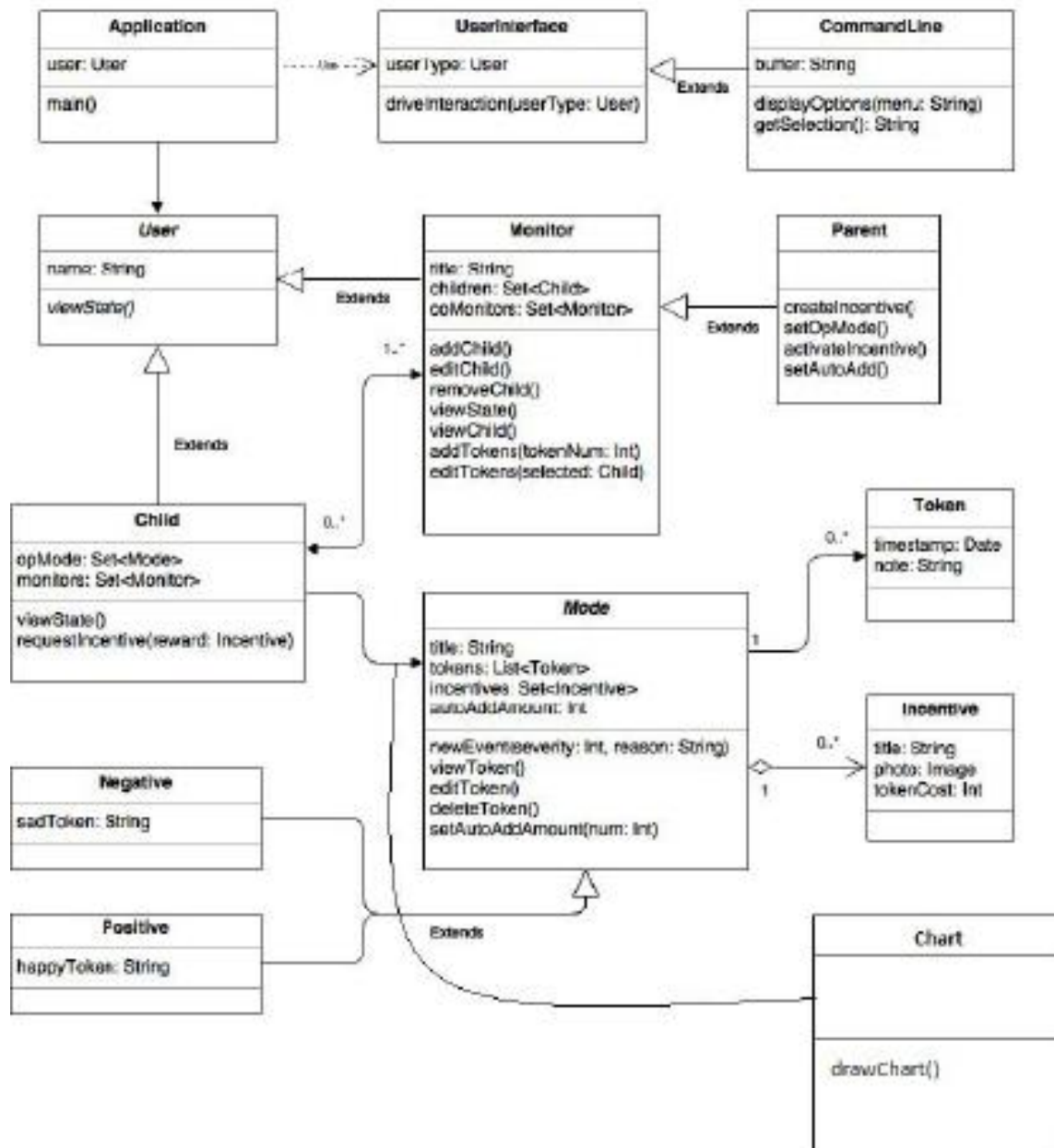


Behave! Class Diagram



For this assignment, we had to implement a way for the behave program to save data and display a chart of tokens earned overtime. For testing purposes we have decided to use minutes as the measurement. For saving information java has an `objectoutput stream` that allowed me to easily save the arrays into a file with all the data intact and to easily restore that into the program when relaunched. It was easier than expected because I was using `arraylists` to store data and it turns out that everything stored in an `arraylist` is serializable.

While working on the charting portion of the assignment, there were many criteria to choose from such as JFreeChart or JCC Kit or OpenChart2 or jCharts. First thing that I wanted was that the library had to be open source. Other things I had to check for was ease of use and how complicated it would affect my existing code. I also looked for examples of each library online since it was my first time doing something like this I wanted to make sure that there were a lot of examples that I could draw from. So it was an obvious choice to choose the most recommended one with plenty of examples which was JFreeChart. While there was not much that I had to change to the existing code for it to work properly I did have to eventually change some parts. I had to change the use of Date class to Calendar class because while sending information to the chart as integers it was easier to do that with the Calendar class because it had a very simple and easy way to grab the minutes from the time stamp, while Date would make things harder to use.