Kardelen Erdal 2018400024
Çisel Zümbül 2018400093

CMPE 230 PROJECT 3

What are the problems that we faced? How do we handle them?

Before this project, we had no idea about API's and Qt. That was a disadvantage, but with the help of our professor and teaching assistants, we learned about them quickly. After the project description is shared with us, we started by doing the table. Because it was easier than getting the data at first. So, we easily build the table because there are lots of information and source code on Internet about Qt, Qtablewidget, etc. After we successfully build the table, we started doing the API part. To be honest, at first, we didn't get that we have to create the url from scratch, since it is not clearly stated in the description. However, when we get it, it was easy to make it because we just need the ids. The second part of the project was getting the ids of coins. We were asked to determine ids from the given file. To do this we created a data reader object which reads the data both from the url and from the given file. This object used "*ifstream*" to read file in the path that is stored in the environmental variable called *MYCRYPTOCONVERT* and QNetworkAccessManager to read file from internet. After it performed this operation, we used *QRegExp* to match symbols and names in the given file with ids in the url. After that, we created our vector containing ids but it took time to figure out how we can call our other object that creates the table by using these ids. We went over our knowledge of slots and signals. Then we decided to create a signal that triggers myTable object to do necessary things like creating the url from given ids and connecting with *QNetworkAccessManager* object. The slot that performs such operations, we called "*dothings*". This signal was emitted by our data reader object after vector of ids created. We connected this signal with the "*dothings*" slot in the constructor of our table creator object. Finally, with this approach, we got our objects to communicate. We made them to perform operations in sequential manner. Since in Piazza forum, our professor said that it doesn't matter if we show the names, symbols or ids in the table, we choose to show ids of the coins.