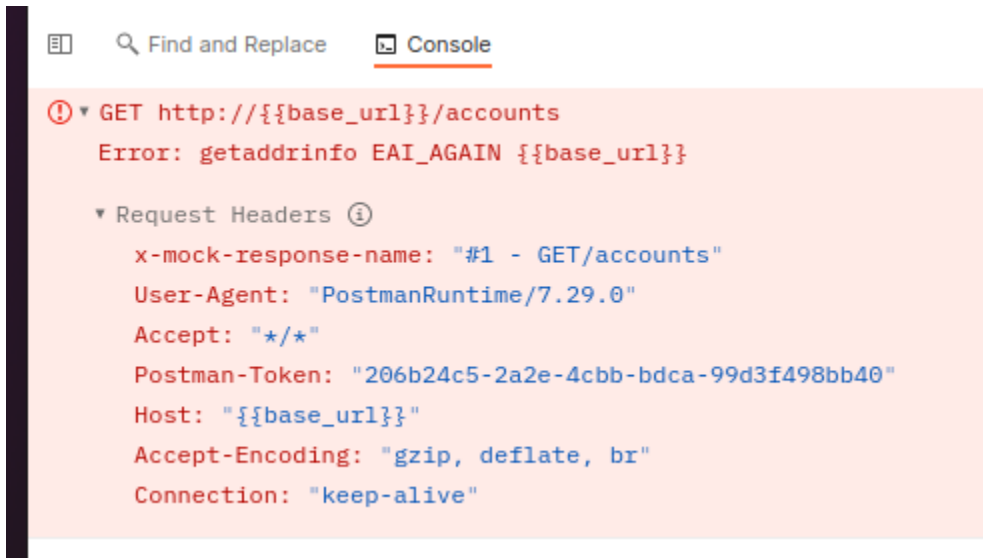Memo

To: Professor Virgil Bistriceanu
From: Jacklyn McAninch
Date: April 25, 2021
Subject: CS 445 Final Project Review

I found this project very challenging, being introduced to Tomcat, Postman, and Java Servlets for the first time. My work was largely unsuccessful, as all 3 of the above produced many errors, some internal without any meaningful error output, and put me way behind schedule trying to debug them. I was never able to submit any tests to Postman without getting the following error:

```
⊞    🔍 Find and Replace    ▣ Console

ⓘ ▾ GET http://{{base_url}}/accounts
     Error: getaddrinfo EAI_AGAIN {{base_url}}

   ▾ Request Headers ⓘ
      x-mock-response-name: "#1 - GET/accounts"
      User-Agent: "PostmanRuntime/7.29.0"
      Accept: "*/*"
      Postman-Token: "206b24c5-2a2e-4cbb-bdca-99d3f498bb40"
      Host: "{{base_url}}"
      Accept-Encoding: "gzip, deflate, br"
      Connection: "keep-alive"
```

I created the REST_controller file to the best of my ability without being able to test it out in action, and in the interest of time I only implemented the first two object types: Account and Ask. I felt this was the best approach because the others are all very similar, and by carefully implementing what I could I hope it shows that I did my best. On the plus side, the project does successfully produce a .war web archive file that can be deployed on Tomcat.

A similar story with JUnit Tests, to have some sort of deliverable without turning in any later, I only wrote unit tests for Account with 100% coverage and Ask for nearly full coverage. Given the time I would implement tests for Gives, Thanks, and Notes, individually, and then some where they interact with each other.

Total lines of code in source (left) and complexity according to Jacoco test report (right):

Account.java	46	28
AccountManager.java	65	35
Ask.java	53	29
AskManager.java	89	44
BuyNothingObj.java	12	6
Give.java	42	21
GiveManager.java	90	43
Note.java	29	16
NoteManager.java	106	51
NullAccount.java	2	2
NullAsk.java	2	2
NullGive.java	2	2
NullNote.java	2	2
NullThank.java	2	2
Thank.java	21	12
ThankManager.java	77	38

And unit test:

BuyNothingTest.java	524