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Assignment 4

Client App

Link to access demo video: http://web.engr.oregonstate.edu/~nguyminh -- Click demo.avi

http://web.engr.oregonstate.edu/~nguyminh/Clientapp/app/src/main/java/com/example/minh/clientapp/MainActivity.java

Above links to code for POST requests.

The app I created is a simple app that sends a POST request to my API from last week. It allows for a simple username creation as well as a first name. After inputting these 2 text fields, user will press the ENTER POST DATA button and it will fire off a post request to http://assignment3minh.appspot.com/client which will create a username and first name accordingly. The server then sends a JSON response of the data that was just entered back to the app where it is parsed and displayed right below the input fields.

If you want to quickly make some cURL calls to my API to test for a response, you can test it with these 2 test calls:

1 ) curl --data-urlencode "username=test1" --data-urlencode "firstname=minh" -H "Accept: application/json" http://assignment3minh.appspot.com/client

2 ) curl --data-urlencode "username=test2" --data-urlencode "firstname=john" -H "Accept: application/json" http://assignment3minh.appspot.com/client

These will both send JSON response back to the cURL requests to show that the API does send a response which needs to be parsed.

The platform I used is android, developed within android studio. I used an emulator for testing and debugging which worked out nicely since I don't own an android phone to actually use the app myself.

Attached are a few documents that aid in the deliverability of this assignment. Since my microphone has recently broken in the last week, I was unable to talk during my demo. So **deliverable.txt** is a text file in which I used in the video **demo.avi**. **deliverable.txt** simply has my narration of what I'm doing throughout the demo, in case you cannot see well in **demo.avi**.

**MainActivity.java** contains my main part of the backend code that does all the work. If you open up **MainActivity.java,** you will see at line 51 that I set my SERVER\_URL variable to be http://assignment3minh.appspot.com/client. I then make calls to this url starting at line 103 down to 151.

Between lines 136-141 is where I parse the response from the server into string objects where I display on the android app.

For the mobile feature, I created a functionality in which the app will play different sounds depending on the button clicks. When clicking the ENTER DATA POST button, if the fields are properly filled in, then you will hear a positive sound. If the fields are empty, then you will hear a negative sound to indicate an error. Additionally, a dialog box appears to warn users when fields are empty. I also add in a feature that you see in the demo that plays an mp3 song when the image button is clicked of Rick Astley. The application accepts any string or integer in its field. As long as it is not an empty string.

The UI interface is very simple. There is only one page, and it is clear in what it does as far as demonstrating its ability to make a POST call, Receive and parse JSON request and display to user. It allows user to affect what data it's sent to the POST request by input fields.