
Design Document for ISU Geoguessr

Group 4_rasel_4

Jacob Garcia: 33.33% contribution

Noah Goche: 33.33% contribution

Dylan Longlett: 33.33% contribution

Frontend

Views

Login

Signup

Home

Play

Leaderboard

Stats

Profile Edit

Chat

Game Over

GUI

XML Layout
Files

Communication

Volley

Request JSON
Object

Request JSON
Array

Helper Classes

net_utils Requests

JsonObjReq
JsonArrayReq
Login
Logout

net_utils Const

URL_GET_USERS
URL_CREATE_USER
URL_CREATE_STATS
URL_GET_STATS
URL_DELETE_USER
URL_DELETE_STATS

Backend

Communication

REST

POST

PUT

GET

DELETE

Controllers

User

Stats

Location

Database

MySQL

User

Stats

Locations

Messages

Legend

HTTP Connection

General Relation

1. Frontend

- **Views:** This section includes the different screens or views that the user interacts with in the app, such as:
 - Login
 - Signup
 - Home
 - Play
 - Leaderboard
 - Stats
 - Profile Edit
 - Chat
 - Game Over
- **GUI:** This part handles the user interface (UI), which consists of XML layout files for the design and display of the views.
- **Communication:**
 - **Volley:** A library used for network communication. It manages requests to the backend:
 - **Request JSON Object:** Request for a single JSON object.
 - **Request JSON Array:** Request for a list of JSON objects.
- **Helper Classes:** These are utility classes that handle network-related tasks:
 - **net_utils Requests:** Handles requests like JSON objects or arrays.
 - **net_utils Const:** Stores constants like URL endpoints:
 - URL_GET_USERS, URL_CREATE_USER, URL_CREATE_STATS,

2. Backend

- **Communication:** This section handles interactions between the frontend and backend using REST APIs:
 - **POST, PUT, GET, DELETE:** These are HTTP methods used to perform operations on the backend (e.g., POST for creating data, GET for retrieving data, etc.).
- **Controllers:** These are the backend components that handle the logic of the app:
 - **User:** Manages user-related functionality.
 - **Stats:** Handles the user's statistics.
 - **Location:** Likely manages location data in the app.
- **Database (MySQL):**
 - Stores data and manages the relationships between different entities:
 - **User:** Stores user information.
 - **Stats:** Stores user stats.
 - **Locations:** Stores location data.
 - **Messages:** Stores chat or message data.

