Manual Test Plan

Prerequisites

1. Intellij IDE
2. React Native
3. Expo
4. npm version 6.14.4

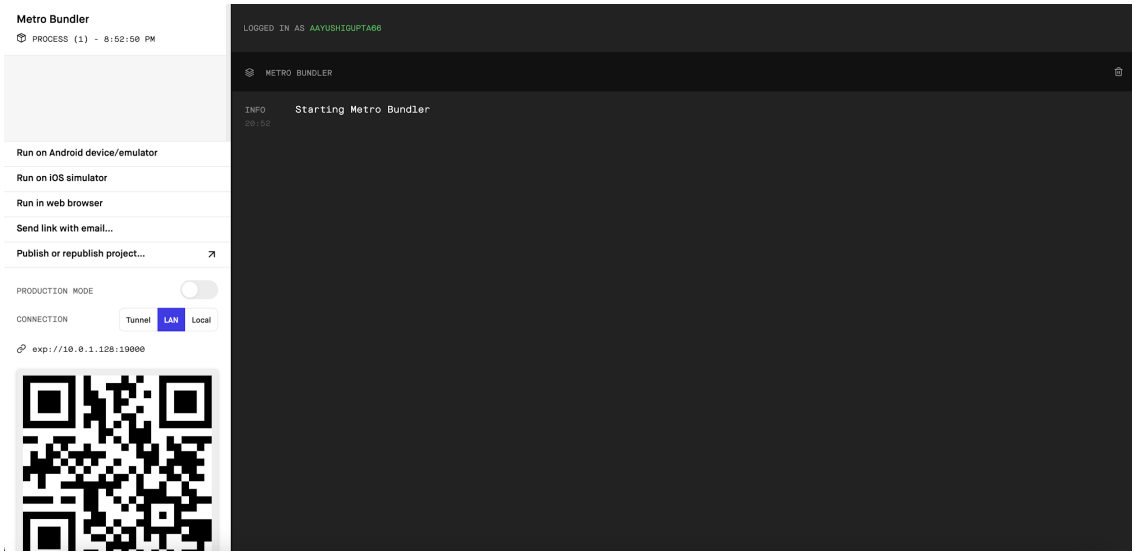
Environment Setup and configurations

- Mac OS environment
- Conduct manual testing by manually validating each functionality by creating and executing test cases. (https://reqtest.com/testing-blog/gui-testing-tutorial/)

Operations and the results

MOBILE APPLICATION

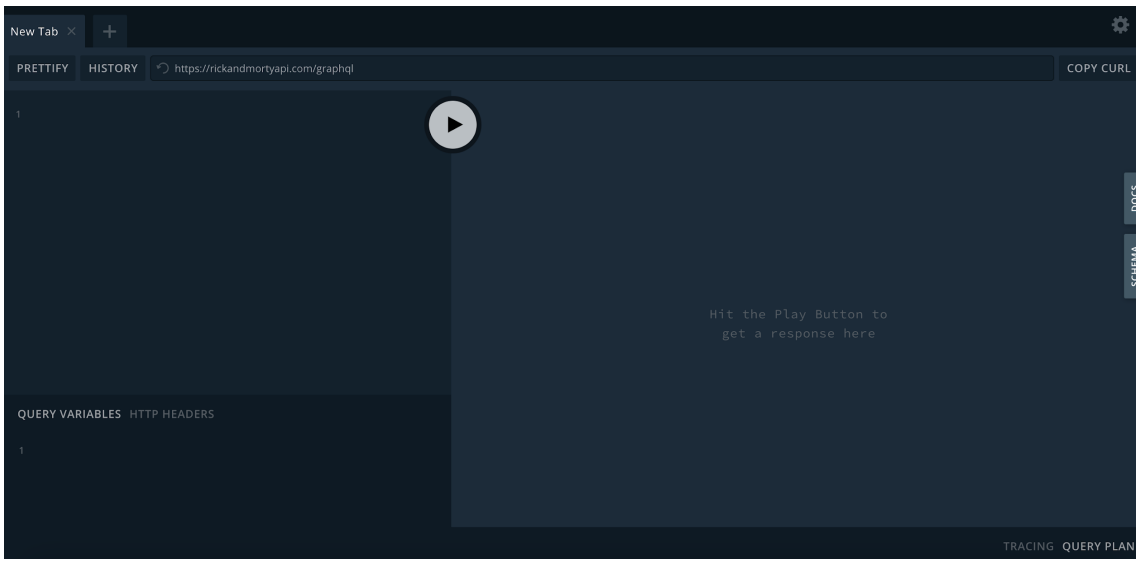
- The mobile app uses React Native - an open-source, front end, JavaScript library
- In order to view the mobile app locally, you must run `expo start` within the mobile-app directory
- The following webpage will open



- You can either run the iOS simulator or use the QR code on your own mobile device to access the mobile app locally

GRAPHQL EXPLORER

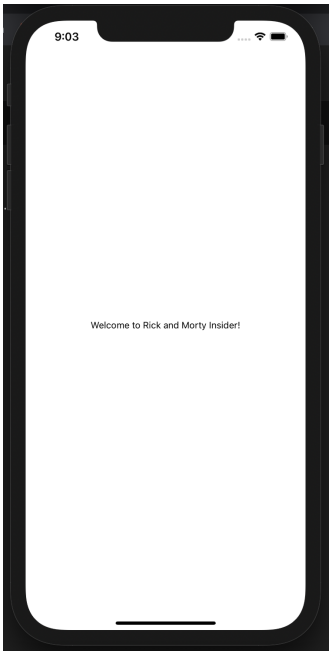
- The application uses GraphQL - open-source data query and manipulation language for APIs
- In order to test the queries developed, you must use the GraphQL explorer provided
    - https://rickandmortyapi.com/graphql
- The webpage will look like this
    - The query input on the top left
    - The query variables on the bottom left
    - The response on the right



Test Items

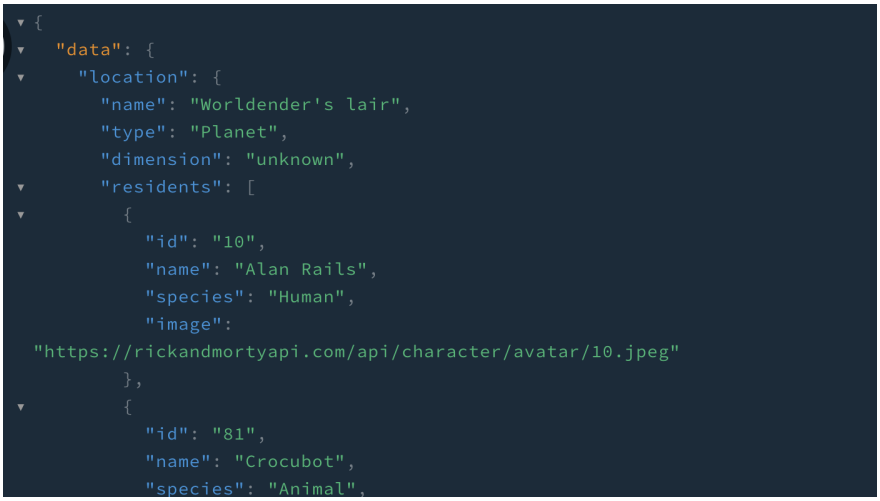
MOBILE APPLICATION

1. Check if the React App was set up properly
    a. Run `expo start` and open the iOS simulator
    b. Make sure the app renders successfully (success)



2. Check if the detailed character query works
    a. Enter the ***GET_PROFILE*** query from `ProfileParser.ts` under the query input
    b. Enter { "id": 4 } under query variables
    c. Click the play button and make sure the output returns the information for the character with the id=4 (success)

3. Check if the detailed location query works
    a. Enter the ***GET_LOCATION*** query from `LocationParser.ts` under the query input
    b. Enter { "id": 4 } under query variables
    c. Click the play button and make sure the output returns the information for the location with the id=4 (success)



4. Check if the detailed episode query works
    a. Enter the ***GET_EPISODE*** query from `EpisodeParser.ts` under the query input
    b. Enter { "id": 4 } under query variables
    c. Click the play button and make sure the output returns the information for the episode with the id=4 (success)

5. Check if the character query works
    a. Enter the ***GET_CHARACTERS*** query from `CharactersParser.ts` under the query input
    b. Enter { "page": 1 } under query variables
    c. Click the play button and make sure the output returns the information for the first 20 characters (success)


```
{
  "data": {
    "characters": {
      "results": [
        {
          "id": "1",
          "name": "Rick Sanchez",
          "status": "Alive",
          "species": "Human",
          "image":
"https://rickandmortyapi.com/api/character/avatar/1.jpeg"
        },
        {
          "id": "2",
          "name": "Morty Smith",
          "status": "Alive",
          "species": "Human",
          "image":
```


6. Check if the visualization query works
    a. Enter the ***GET_VISUALIZATION*** query from `VisualizationParser.ts` under the query input
    b. Enter { "ids": [1, 2, 3, 4, 5] } under query variables
    c. Click the play button and make sure the output returns the characters for the first 5 episodes (success)


```
{
  "data": {
    "episodesByIds": [
      {
        "characters": [
          {
            "id": "1",
            "name": "Rick Sanchez"
          },
          {
            "id": "2",
            "name": "Morty Smith"
          },
```

7. Check if the search query works
    a. Enter the ***GET_SEARCH*** query from `SearchParser.ts` under the query input
    b. Enter { "name": "Rick", "character": true, "location": false, "episode": false } under query variables
    c. Click the play button and make sure the output returns the characters matching the name “Rick” (success)


```
{
  "data": {
    "characters": {
      "results": [
        {
          "id": "1",
          "name": "Rick Sanchez",
          "species": "Human",
          "image":
"https://rickandmortyapi.com/api/character/avatar/1.jpeg"
        },
        {
          "id": "8",
          "name": "Adjudicator Rick",
          "species": "Human",
          "image":
"https://rickandmortyapi.com/api/character/avatar/8.jpeg"
        },
        {
          "id": "15",
          "name": "Alien Rick",
          "species": "Alien",
```