Functionality Specification Report Group 8

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Requirements

1. Business requirements

- a. Administrators are allowed to enter/manipulate data in the database. [3]
- b. General users are allowed to submit requests to change data in the database, but they must be approved by an administrator (for example, user reports inaccurate weather data in their area). The previously discussed requirements don't pertain to account creation, that is automatically put in the database. [3]

2. Regulatory requirements

- a. The system will have limited access to authorized users. An example is admins can do certain things that regular users cannot do [3]
- b. The system will only allow those with an email in the database to use the application.
- c. The system must ask for user consent to gather their location data to accurately display weather information. This will most likely be asked once. [4]

3. Database Entry Requirements

- a. Login information: email (string, valid email) and password (string) are entered into the database upon account creation. Location can be entered too. Database is queried for matching email and password combo during login attempt. If login is successful, location is fetched. [2]
- b. Location information: Database will store location: country, state, city (string), along with its corresponding temperature (int), and chance of severe weather and chance of rain (double).

4. User Interface Requirements

- a. Login page/create an account accepts text entries on a form, these will be stored into a database
- b. Weather page prints screen data to show the user
 - i. This includes everything listed in the Database Entry. (c, ii)
- c. Include specific symbols which pattern matches a picture to a word.
 - For example: Having a small icon picture of rain next to the chance of rain will help users navigate and recognize information that they want to see.
 [1]

5. Security Requirements

- a. Administrators have "administrator privileges". They are able to manually enter, delete, and edit information in the database. This includes accounts. [3]
- b. Users can only edit information pertaining to their account. They may also delete their account and create an account. However, they have viewing access to all the weather data in the database.
- c. Both users and admins are able to create, edit, and delete their own account, as well as login and logout.

Works Cited:

- [1] Weather app Icons & Symbols (flaticon.com)
- [2] Why Do We Use Usernames And Passwords? (forbes.com)
- [3] <u>User Role and Permission Management: Designing Efficient Models | Frontegg</u>
- [4] Thoughts about location data privacy and consent (incognia.com)