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2016

A Mobile App for the Virtual Climate Adaptation Library

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A Mobile App for the Virtual Climate Adaptation Library

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Background:

- One of the largest climate adaptation libraries in the world
- Houses 1800+ documents on coastal climate adaptation.
- Used for research, policy work in the United States, and by academics around the world

Goal:

Our goal for this project was to make the Virtual Climate Adaptation Library available through an Android/Google and iOS app. This is interesting because this document repository is already in use in the field globally but currently only accessible from a desktop and we want to make it available through most mobile devices.

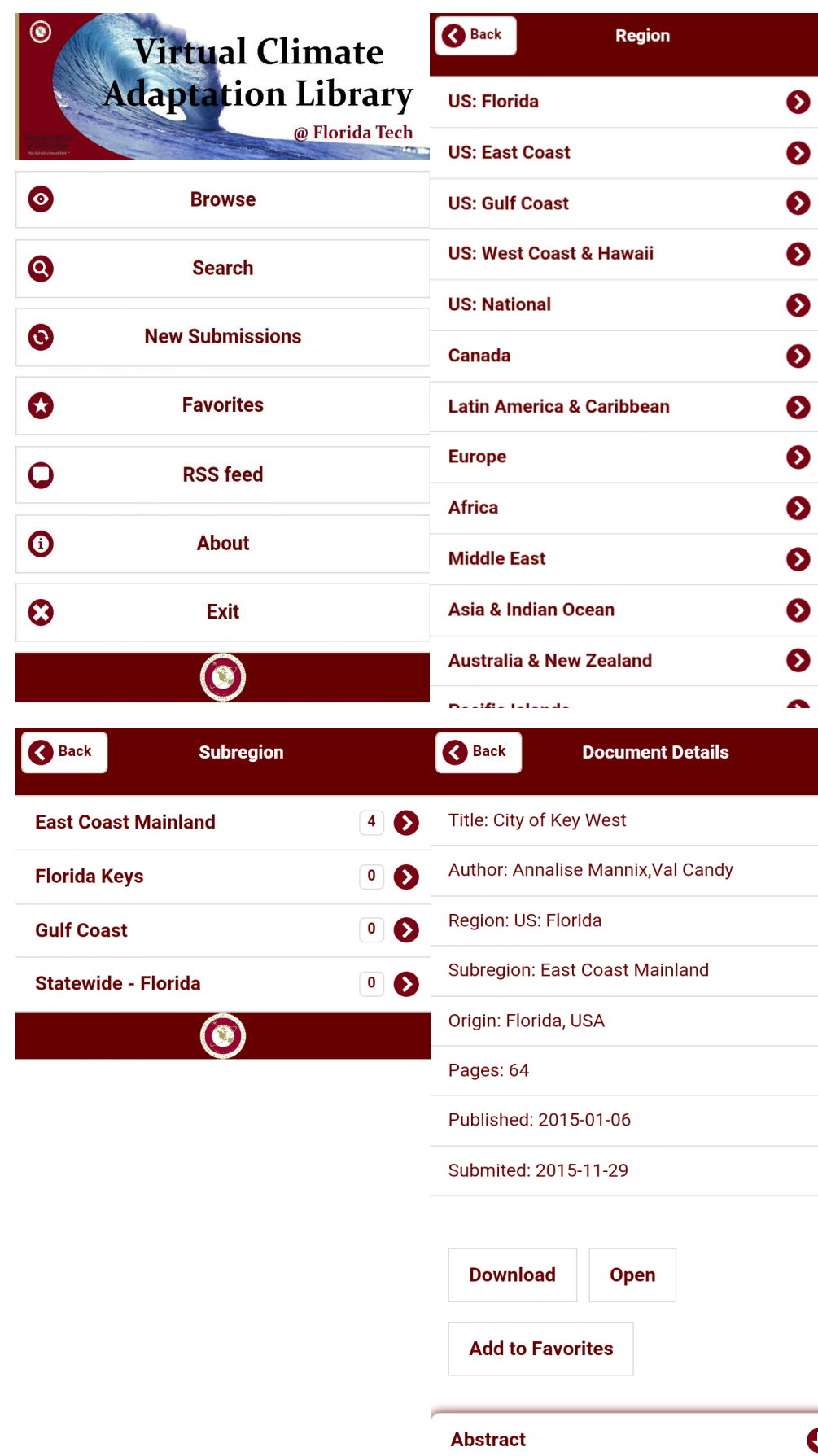
Feature List:

- **Browse:** Allows the user to view all the documents in the library organized into Categories call Regions and sub-categories called Subregions.
- **Search:** Allows the user to search and view all documents in the library whose title, author, and/or keywords match what was entered.
- **Favorites:** Allows the user to select and access documents that they deem important without the need to search for them.
- **RSS Feed:** Adds a RSS Feed from *Scientific American* that disseminates information to the user.
- **New Submissions:** Shows the user the 20 most recently added documents.

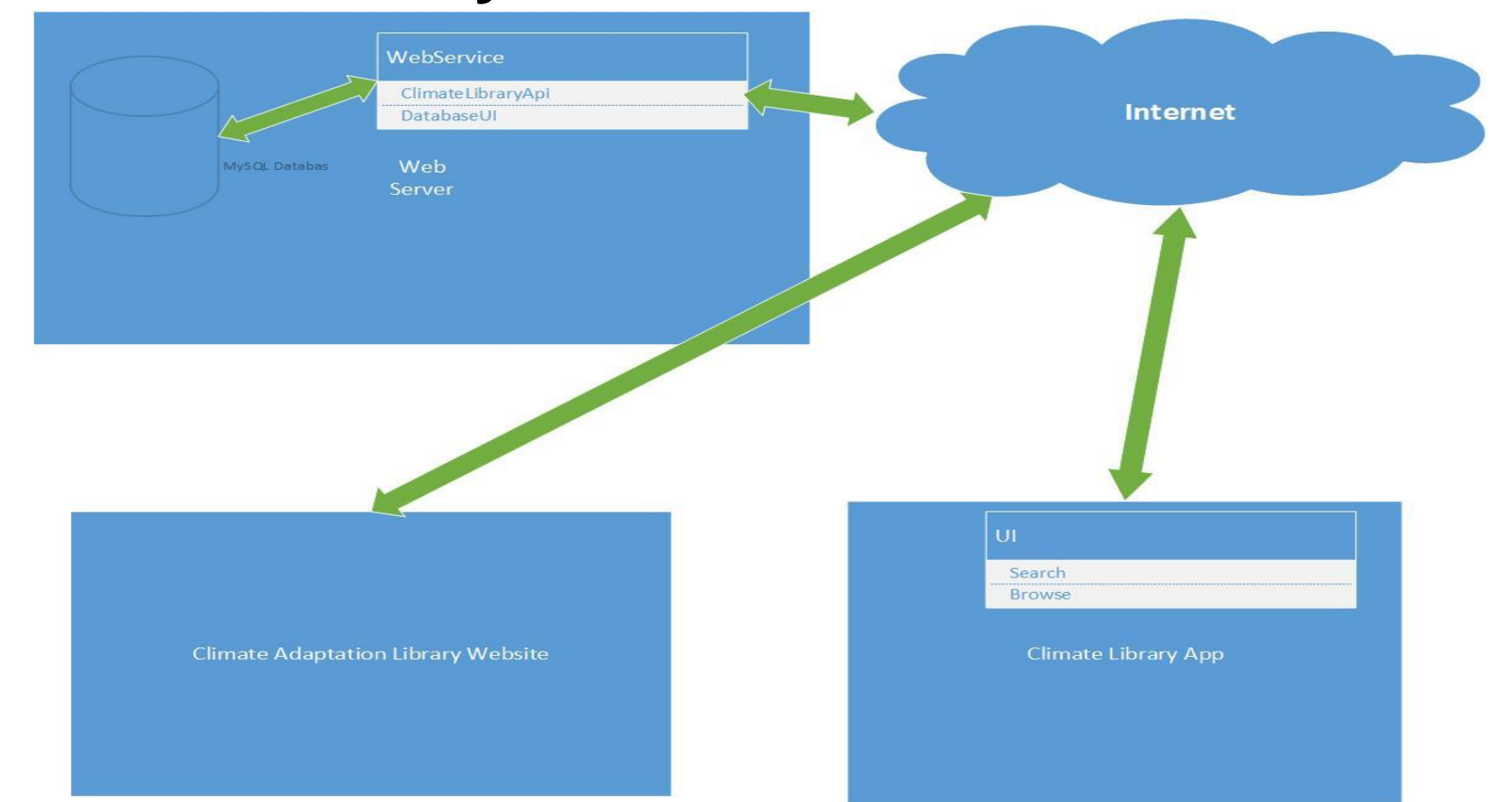
Technical Challenges:

- No prior Android development experience
- No prior iOS development experience
- Server creation
- Population of literature that the database draws from.
- Must be usable on multiple devices with varying screen sizes and resolutions

User Interface



System Architecture



System architecture:

The MySQL database holds the data (documents, tags, authors, etc.) that both the mobile app and the main website use. When either the website or the mobile app requests data they call the webservice, which in return, grabs that data from the database that is continuously growing and supplies it to the website or the mobile app. Using a single database allows data in the library to be easily updated for both products.

GUI:

The main criteria for GUI was to make it simple and intuitive so that it would be accessible to as much people as possible.



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