Project Architecture

## Logical software architecture: **3-tier web-based architecture pattern**

The project will follow this architecture pattern as the Django web framework is being used for development. Django acts as the application server, containing the business and application logic created by the developers. During development, each member uses Python to create a local web server on their own workstation. This is the physical web server before the full product is eventually hosted on an external host. The Database hosts all the permanent data for the application, but can be updated after operations are performed on the data at the Application server layer. Developers also have the ability to create new entities to be represented in the database. The Presentation layer contains the user interface that is presented to the client when they request the application through their web browser. According to the nature of this environment and the aforementioned circumstances, a 3-tier web-based architecture pattern shall be used for the project.

Application Server Layer

Database Layer

Web server Layer

Presentation Layer

## Physical software architecture

Database  
(tables)

Django framework  
(code)

Web Browser

Python localhost / Remote web server

…

Further tables for separate items and new future entities

Web pages

HTML views

Serving individual web pages / applications

Cities

Server-side input validation

Processing site data (admins)

Users

Processing user data

Item selection

Log in

Account Registration

HTML/CSS design

Menu

Client-side input field validation