Logical and Physical Architecture

**3-tier web-based architecture**

Logical Diagram

Our smart city website follows 3-tier web-based architecture, as the logical design shows a generic design pattern of the architecture. This includes having a user browser tier which is the user interface, with the main function to translate functions to the user that is understandable. The web server tier is the layer of the architecture that hosts the web pages, so the user can interact will the website. While, the application server tier processes commands from the user and performs calculations. The database layer is the tier where information is stored and retrieved from a database. The information is then passed back to the application server tier for processing and then to the user.

User Browser Tier

Application Server Tier

Database Tier

Web Server Tier

Physical Diagram

The physical diagram gives an elaboration of the logical design, this shows how each of the layers are implemented in the project. The HTML views are hosted in the web server tier, more pages may be implemented in the future, however the diagram below shows the main pages of the website. The application server tier has all the business logic and processes commands from the web server tier. The database tier also stores information about user’s accounts and website data.

User Browser Tier

Application Server Tier

Database Tier

Web Server Tier

HOME PAGE

Personal User Data

Website Data

Business logic module 4 (Home)

Business logic module 5 (Help)

LOGIN PAGE

HELP PAGE

Business logic module 3 (Contacts)

Business logic module 1 (Login)

Business logic module 2 (Forgotten password)

FORGOTTEN PASSWORD PAGE

CONTACTS PAGE