CS-220 Semester Project

Blood Bank Management (with Biometrics and Barcode)

Deliverable#2



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[**Github Repository**](https://github.com/eruditehassan/BloodBankManagementWithBarcodeAndBiometric)

Submitted to:

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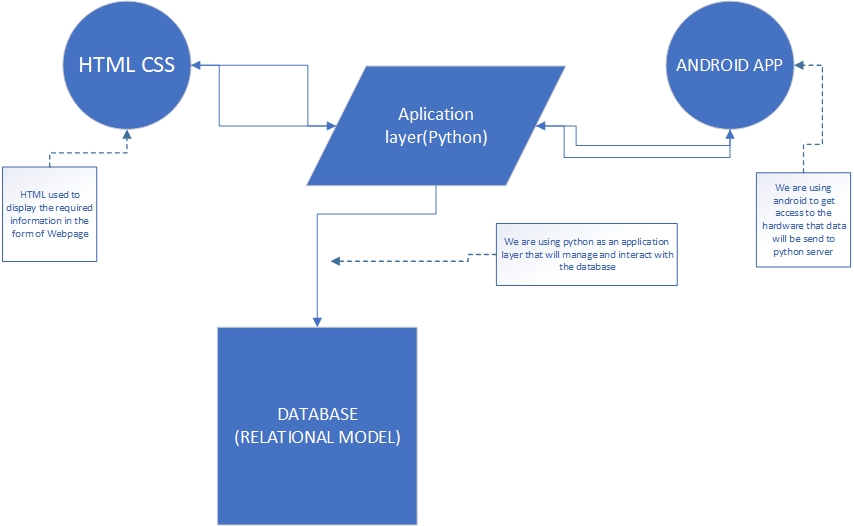
Islamabad

Section 1-Architecturel Model: Development will be carried out with respect to Relational Model (MySQL). In terms of architecture, we will be using **Three Tier Client Server** Architecture Style. This architecture was chosen because it will make the Database management and commencement of our project easier. It was the best approach considering that intrinsically our project had three layers, which are the database layer where storage and retrieval of data takes place, application layer which will link the user to the database, and client layer which will give user an interface to communicate with the module.

Section 2-Tools & Technologies: List down the tools and technologies that you will be using in the following tabular format:

|  |  |  |  |
| --- | --- | --- | --- |
| Tools/Techniques | Layer/Purpose | Counterparts/Other similar tools in the market | Rational for Selection |
| MySQL | Database (To store and retrieve data in an organized and efficient manner) | SQL lite, Oracle | Due to familiarization with its working. In addition, it gives high speed in relatively lesser space. |
| Python | Application Layer (To allow the client to interact with the database to store and retrieve data and perform other basic functionality) | Java, C++, Node JS, PHP | Due to immense availability of open source libraries, stability and previous working experience on a similar project in this language |
| Android Studio (Java) | Cross connection between Application and Client Layer to get hardware feature access in our application layer | Kotlin | Familiarization with Java and previous work on android studio with java in last semester project. |
| Front End Web Development Languages (mainly HTML, CSS) | Client Layer | Desktop or android application | Cross platform compatibility of web on all kind of devices and operating systems including Windows, linux, mac, android, iOS, etc. |

**Flow Chart Demonstration:**

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