## Software Design Document

The software design document would demonstrate how the design will accomplish the functional and non-functional requirements captured in the SRS. The document will provide framework by describing the high level components and architecture, subsystems, interfaces, database design and algorithm design. This is achieved through the use of architectural patterns, design patterns and user interfaces.

## 1 Design Overview

MovieBuzz system will be developed using mainly client-server architecture. The feature of this architecture allows configurality, authentication; inclusion of programs that handle and generate dynamic content; module support etc. Which will allow development of the application with added functionalities over time.

### 1.1 Requirements Traceability Matrix

	Admin component	Movie details , Actor, Actress and Director details	Box Office Net Gross	Region wise box office data
Upload Module	X			
Blockbuster, Super-				
Hit, Semi-Hit and Flop		X	X	
Forecast				
Movie Rating		X	X	
Projected Box Office Rev-			X	
enue			A	
Region where the movie		X		X
will do good business		A		A
Movie Release Month		X	X	
Suggestion		X	X	

## 2 System Architectural Design:

The chosen architecture for our project is Client/Server. The server houses and provides high-end, computing-intensive services to the client on demand. These services can include applications access, storage, file sharing, printer access and/or direct access to the servers raw computing power. Client/server architecture works when the client computer sends a resource or process request to the server over the network connection, which is then processed and delivered to the client. A server computer can manage several clients simultaneously, whereas one client can be connected to several servers at a time, each providing a different set of services. In its simplest form, the Internet is also based on client/server architecture where the Web server serves many simultaneous users with Web page and or website data. The risk associated this architecture is network failure.

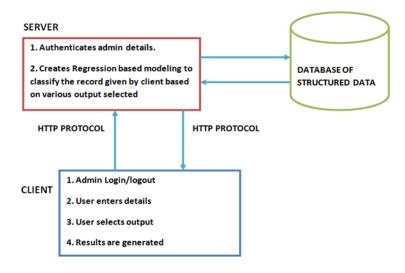


Figure 1: client-server architecture

#### 2.1 Alternate Designs

Alternate designs that can be used is REST architecture. Due to complexity of the REST architecture we have preferred Client-Server architecture over REST.

#### 2.2 System Interface Design

The files that will be used with the project will be excel sheets containing raw and unstructured data. That will be processed and structured and then fed to the database. The system will be integrated with database using .NET Framework Data provider for SQL Server.

#### 3 DETAILED COMPONENT DESCRIPTION

#### 3.1 Admin Component

This component will allow the system administrator to upload new data to the existing database. It will be useful for the administrator to upload data collected from various sites that will be preprocessed and uploaded.

#### 3.2 Movie details, Actor, Actress and Director details

This component has various attributes and information pertaining to Movie details, Actor, Actress and Director's details collected from various websites that will be useful to determine movie's ranking, it's performance whether it will be hit, flop or neutral.

#### 3.3 Box Office Gross

This component will help in deciding the estimated revenue that will be generated by the movie at box-office. It has the estimates regarding the gross income earned by number of movies that will help in creation of model that will try to provide accurate results.

#### 3.4 Region wise box office data

This component will have information regarding the movie's region wise performance by considering it's revenue generation in different parts of the country. This will help in predicting the region where the movie will do good business.

## 4 USER INTERFACE DESIGN

## 4.1 UI layout for user and Admin

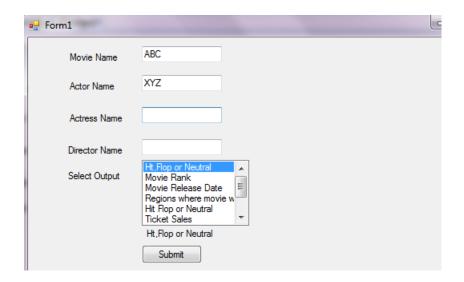


Figure 2: proposed layout for user



Figure 3: separate login page for admin

# ${\bf 4.2}\quad {\bf Class\ Diagram, Data\ Flow\ Diagram, Activity\ Diagram, Use Case}\\ {\bf Diagram}$

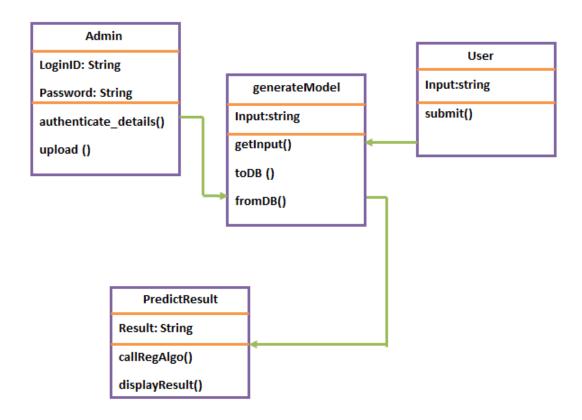


Figure 4: interaction between different objects

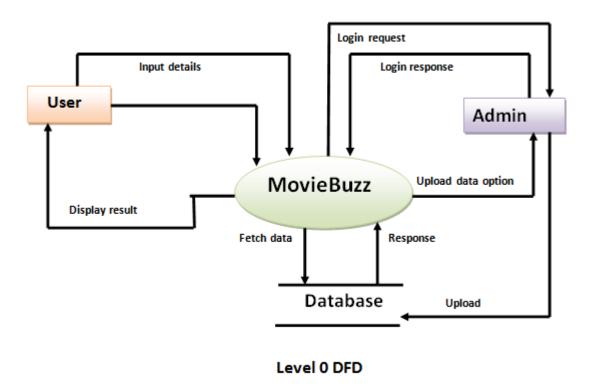


Figure 5: data flow in the system

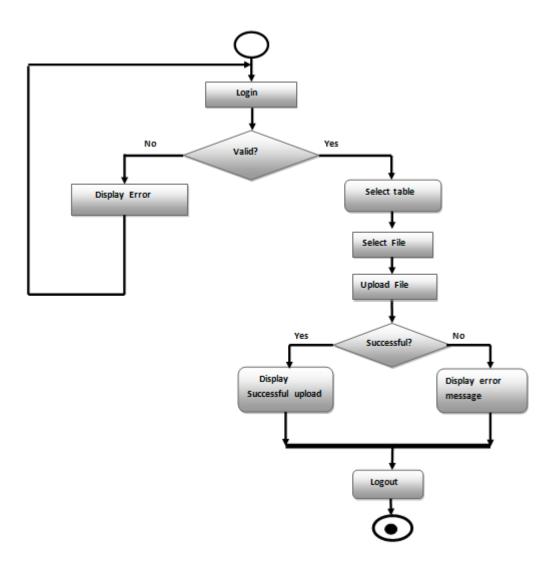


Figure 6: proposed activity diagram

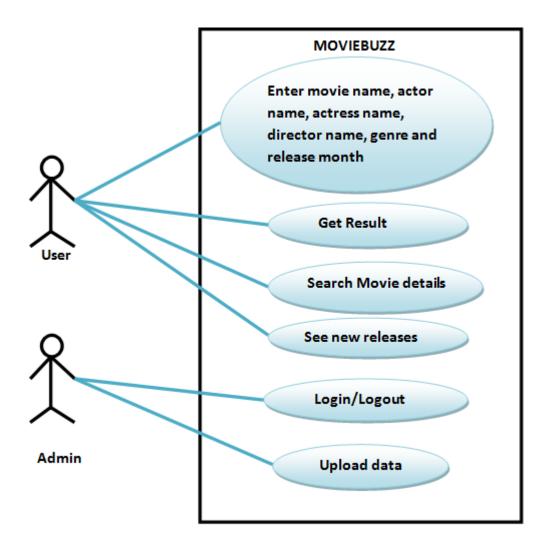


Figure 7: various functionalities given to user and admin