## Assignment-2

Q. 1) Why Cross-Platform Development and User experience are important in Enterprise Development?

Ans:

**Cross-Platform Development:** Software development is a very long and complex process, where different programming languages are used for development of Fornt-end as well as Back-end of Webpages, Mobile applications (Android, IOS).

Wih Cross-Platform Development:

- developers to develop websites and mobile application (both Android and IOS) using one code base.
- only minor changes need to be made for User interface and accesses required for the applications.
- saves time, effort.
- reduces cost of development etc.

**User-Experience(UX):** When electronic devices were first introduced, applications were made with lesast processing power and minimum storage space, and so applications were made just to perform the task at hand. Only skilled manpower were able to use these devices.

As the devices were made available to general public the devices needed to be easier to use, and efficient. This is how User- Expreience came into consideration.

The UX needs to be useful, usable, findable, credible, accessble, desirable and valuable. This is what makes user experience imporatnt.

Q. 2) What is MVC.? Give an example.

Ans.

**MVC:** Model View Controller is an architecture used for developing user interface that divides an application into three interconnected parts. This desig pattern allows code reusability and parallel development.

**Model** is a database, which stores the required data.

**View** is an interface that the users can see.

Controller, connects Model and View,

When a user presses a button, controller sends this information to Model and extracts the function that is done when the button is pressed.

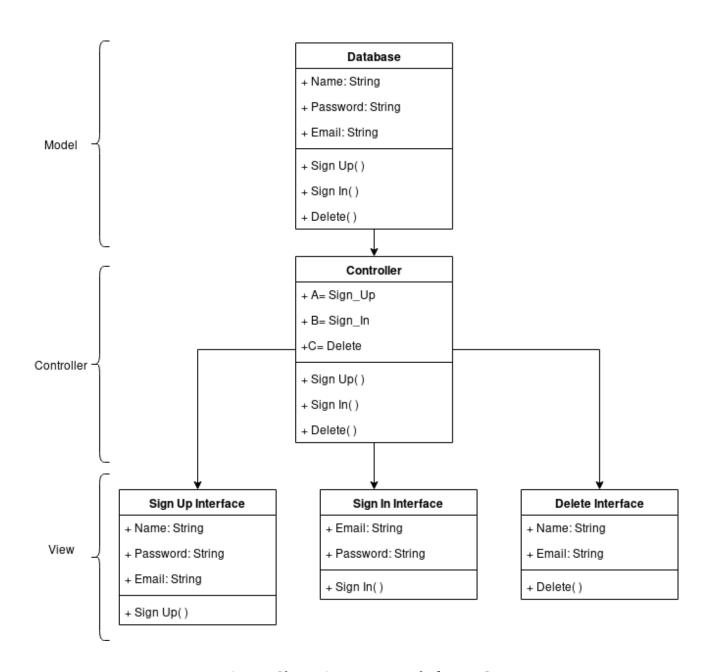


Figure: Class Diagram Example for MVC

## Q. 3) What is Abstract factory? Ans:

Abstract factory is an abstract class for factory design. This means that the abstract class defines the methods/functions which are inherited by other classes. These inherited classes defines the functions as required.

The figure is an example of abstract factory, as it can be used by different outlets. ie. facebook, twitter, instagram can all use the same abstract factory and define it as required.

Database
+ Name: String
+ Password: String
+ Email: String
+ Sign Up()
+ Sign In()
+ Delete()

## Q. 4) What is Factory Design?

Ans: A factory design is a kind of template that specifies the design parameters, and can be used for various products.

## Q. 5) What is Singleton?

Ans: Singleton is a design pattern which has only one instance, i.e. It can be accessed once at a time.