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## **Essay**

### **Comparing the different mindsets between application developers and framework developers.**

#### **Introduction**

Software Application has been solving the problem of our people tremendously, they reduce time to benefit. They help people to communicate, provides medical facility, relatively accurate measurement and extraordinary impact on business aspect. Even though they have tremendous help in solving problems. But during their developing they takes a lot effort and creativity; they need to be organized and accurate to the maximum accuracy. Most of our global problems are repeatedly happened, most of them are for benefit of the people, It can be for the sake of money or time wise, this tends us to reuse our code for different purpose and for the same problem, that is why the concept of Software Framework made it important.

After Software Framework becomes the right hand of application developers, the Jobs that generally would take you hours and hundreds of lines of code to compose, can now be done in minutes with pre-built functions. Development becomes a lot easier, so if it's much easier it's quicker, and subsequently effective. After realizing this impact, the developers have been hunting the use of Framework.

When we see the Security aspect, an extensively utilized framework has big security applications. The big benefit is the neighborhood behind it, where users end up being long-lasting testers. If you find a vulnerability or a security hole, you can go to the framework's web site and let the team understand so they can fix it. With out the cooperation of framework developers, the application developers they don't get framework usable.

When application developers use Software Framework it reduces Expense, most popular structures are complimentary, and considering that it likewise helps the developer to code faster, As final destination of the software is the client, the more fast delivered application the more save expense and the expense for the final client will certainly be smaller.

As a software developer my mindset was always pointed towards how to accomplish the functional and nonfunctional requirements of the software, how to best design it for great flexibility and maintainability, higher performance, and how to

appropriately handle potential concurrency issues etc. Now, when I try to understand what frameworks are and how they are designed, I was getting it mixed up with the meaning of libraries. But seriously what is the difference between a library and a framework? to my understanding, a library is a collection of functions and classes that one can utilize to facilitate building an application. Whereas a framework provides generic flow of control to custom written computer code or class using a design principle known as Inversion of Control. This design principle is often referred to as the Hollywood principle. In Hollywood, if a young actor who is struggling to start his career in the movie industry reach out to producers for a role in a movie, the tradition is that he will be told, “don’t call us, we’ll call you when we need you!”. Generally, frameworks work in the same manner, by injecting services to custom designed developer classes at run time when they are needed. For this reason, it’s usually challenging for developers to understand what frameworks are and how they function.

One of the main things a framework developer takes in to consideration is not to tightly tie a frame work to be used by just one application. It should accommodate for future common features that applications come up with and use this framework. The mindset of framework developers is tied to the OOP good design principles.

Based on my experience with the project we did for ASD course, my team and I worked on a Library-Management. We applied the design patterns that suited best with our idea and we came up with a framework. Our mindset while building the framework was to make something that’s good as it is and be extendable friendly enough for other teams to be able to use it for something more. The other team that used our framework were able to understand and study the content of our framework.

In conclusion, Framework developers in general provides a hook up method thinking of extensibility, simplicity and clarity with clear boundaries in mind for future development of applications. While, an application developer mindset is pointed towards how to accomplish the functional and nonfunctional requirements of the software. The application level is where abstract functionality is taken to a concrete realization. But both the Designer and Developer have one very important trait in common: problem-solving.