Reuse-oriented Software Engineering

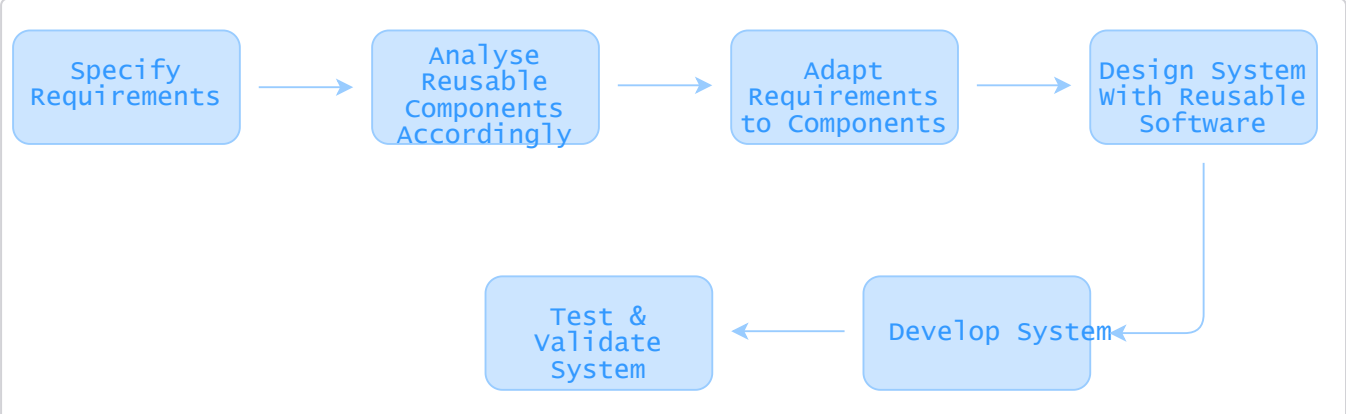
A brief overview of the reuse-oriented software engineering process.

WE'LL COVER THE FOLLOWING

Introduction

As we have already seen in the frameworks chapter, most software projects require some software reuse when people working on the project know of preexisting designs or codes that are similar to what is required. They look for these, modify them as needed, and incorporate them into their system according to its particular requirements. This is done regardless of the development process that is being used.

In recent times, however, software development processes that focus on the reuse of existing software have become widely used. Reuse-oriented approaches rely on reusable software components and an integrating framework for the composition of these components. Sometimes, these components are systems in their own right that may provide specific functionality, much like the frameworks we have previously studied.



Reuse-oriented Software Engineering Process

Advantages & disadvantages

Reuse-oriented software engineering has the obvious advantage of significantly reducing the actual development that needs to be done from scratch, which in turn ensures faster product delivery.

However, reusing other software also means that the requirements will inevitably have to change according to the specifics of the software being used, which may not be perfectly equipped to cater to the requirements of the software being developed. This also means that there is a significant loss of control over how the software evolves since its evolution then depends on how its third-party components evolve.

Conclusion

Reuse-oriented software engineering is the most prevalent approach to developing software right now. With the introduction of frameworks such as Express and Angular, web development has become significantly simplified, and nuances are provided for complicated code that is required in almost all websites. It is, therefore, a good idea to leverage these nuances when developing an initial website to create sophisticated programs that allow you to understand the functionality you are developing instead of getting intertwined in extraneous details of the code that produces it.

This sums up the multiple software engineering process models that may be useful in structuring your web development process. In the next lesson, we will continue to discuss different approaches to testing your software and how they can be integrated with the development process.