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Assignment 11

Discuss what are packages in Java. What are the advantages of Java Package? What are the types of Packages in Java?

The concept of packages in java is a very core and needed mechanism that makes java a very powerful and capable object-oriented programming language. Packages in Java allows is a way to “package” or combine numerous and different classes sub packages and interfaces. Packages can be quite helpful in preventing naming conflicts they can also be quite helpful in searching for classes and interfaces easily. Packages can also be considered as data hiding or data encapsulating which can keep your code efficient and free of bugs and easy to manage. Another way of thinking about packages is to think of how the folder structure in our computers work, they are used to organize and neatly maintain different pieces of code such as classes and interfaces.

What is a JAR file in Java? Why should you use JAR files? Show an example of how do you create a JAR file?

In essence JAR file is basically a zip file it can contain a number of things depending on your program or code, generally it contains classes in the form of compiled java code and sometimes it can contain the java source code as well. It also stores all the metadata so that that if or when you are sharing your code it houses all the necessary information regarding your source code. I jar file can contain pretty much anything if you’d wish, apart from the general compressed .class files it can contain any kind of media as well such as audio files image files and the directory of your source code. The jar file is a very important and necessary part of your java program.

Discuss the history of JavaFX, its features, and applications. Discuss the advantages and disadvantages of JavaFX. Why should you use JavaFX? This assignment demonstrates your understanding of JavaFX purpose

Javafx was launched around 2005, as a sequel in essence to the java swing. While swing has a more extensive and well-established library java fx is a newer and more future proof platform with future support as well. Java fx allows for GUI based applications in the java programming language. Some features that It has are high powered media canvas api built in controls and Swing interoperability to name a few. We can use java fx for any kind of GUI interface programs, especially involving the model view controller pattern which works really well and is supported natively by the java paradigm which makes it an ideal choice for MVC pattern-based applications.

Explain exactly what is GitHub? How does it work? How do you use GitHub and why should you use GitHub?

GitHub is a software hosting platform that allows programmers to host and upload their software code at a decentralized place where they can host and share their code with other people as well. People can contribute to the hosted code using the GitHub commands. You can download the code as well, downloading the code is called a pull request. Commonly it is used to host open-source projects which others can utilize. In my opinion every professional or aspiring developer should use GitHub as it can serve as the central hub for all your projects and you can keep a track of all the code you write, and as explained before you can also share it with others to get feedback and to allow contribution. GitHub uses the Git software which is an open-source version control software.

References:

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