

FP Assignment 2 Report

In this assignment, all aspects of the code are manually coded and built from the ground up. The GUI is also done using JavaFx which only works as a desktop application without being reliant on ports for iOS and android [3]. This means that it will limit the end user to use either a desktop or laptop. Ideally, this Hotdesking app would be built as a website which either runs on rented servers or company servers which employees and admins will be able to run on their web browser, regardless of device type.

If we wanted to keep as many similarities as possible between the improved version and this current version, we can make use of Javalin web framework [4]. This will alter the way the controller interacts with the GUI as well as change how the GUI is modified (https as opposed to JavaFX) but overall coding procedure will be quite like coding with JavaFx.

Using Javalin, the user will interact with the program using their browser instead, allowing access to the program from anywhere if they have the login credentials and, in the case, it runs off a private company server, any network configurations set up. Since Javalin uses html for the front end, we will be able to use templates from BootStrap to accelerate the development process, since parts of the GUI can be quickly repurposed to suite our needs rather than code it from the ground up.

Alternatively, we could program this app using the Spring Boot framework. Spring boot also allows the app to be used via a browser rather than a desktop application. It also provides lots of auto configuration [1] as well as embedded HTTPS servers to test web applications. It also helps reduce the use of “boilerplate code, annotations, and XML configuration” [6] in the source code, which in turn reduces the complexity of the program while making it more readable and easier to understand. Springboot also reduces development time and plugin support.

References

- [1] “Learn Spring Boot Tutorial - javatpoint,” www.javatpoint.com. <https://www.javatpoint.com/spring-boot-tutorial> (accessed Jun. 06, 2021).
- [2] Amir Homayoon Ashrafzadeh, “FP 12.” Accessed: Jun. 06, 2021. [Online]. Available: https://rmit.instructure.com/courses/80003/pages/week-12-learning-materials-slash-activities?module_item_id=2819717
- [3] “java - Is it possible to run JavaFX applications on iOS, Android or Windows Phone 8?,” Stack Overflow. <https://stackoverflow.com/questions/20860931/is-it-possible-to-run-javafx-applications-on-ios-android-or-windows-phone-8> (accessed Jun. 06, 2021).
- [4] “Documentation - Javalin - A lightweight Java and Kotlin web framework. Create REST APIs in Java or Kotlin easily.,” Javalin. <https://javalin.io> (accessed Jun. 06, 2021).
- [5] M. O. contributors Jacob Thornton, and Bootstrap, “Bootstrap.” <https://getbootstrap.com/> (accessed Jun. 06, 2021).
- [6] “What Is Spring Boot?,” Stackify, Sep. 16, 2019. <https://stackify.com/what-is-spring-boot/> (accessed Jun. 06, 2021).