Final Project Reflection

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This was my first attempt at a project at this scale. Previously, I had made multiple programming files in different languages but never cohesive like this project. My final project was a car rental services utilizing 4 design patterns. Template, Factory, Command and Decorator. The major methods are divided by a factory method RentWithDriver and RentWithoutDriver. RentWithDriver will have the Template method and RentWithoutDriver will have the Decorator. The Command pattern can be found in 5 files. The Command Interface, The receiver Order class, the invoker CustomerServiceRep and the two orders that were created RentWithDriverOrder and RentWithoutDriverOrder encapsulate the commands.

The project is complete. But if I were to add onto it, I would create more unit tests, create HTML, CSS and use Spring and Javascript to put it online as an interactive webpage.

My biggest challenges, by far, were the Unit tests and putting all the patterns together. I think when in the future I utilize patterns I won't come in thinking where I should fit the patterns and rather have it occur organically. As it was, I created the idea but then had to figure out how to implement 4 patterns. Since I had done factory and decorator, they were easy. Figuring out the other two patterns was harder and required googling patterns and how they work. The unit tests were annoying because I use VScode and it didn't have the capabilities of a IDE like Intellij or Eclipse so I didn't know how to write them or when I did know how, if they ran properly. I ended up putting the unit test inside my src folder.

In retrospect, I would change the way I approached the question and use either Maven or Gradle to structure my files because to me it looks untidy. Maven will also make me organized which I think I need. ﻿﻿﻿﻿﻿﻿﻿﻿﻿﻿﻿﻿﻿﻿﻿﻿﻿﻿﻿﻿﻿﻿﻿﻿﻿﻿﻿﻿﻿﻿