**Reservation**

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| Project | **Reservation** |
| Product/Subject |  |
| Submitted To |  |
| Submitted From | Pradeep |
| resented By | 12/10/2020 |
| Date Submitted |  |
| Reference |  |

**Prerequisites**

Basic Java knowledge, including an installed version of the JVM and Maven.

**Approach :**

* It is a Standard springboot + jpa + junit5, Maven project .
* I've used h2 db so whoever is going to use/ evaluate doesn't need any external configs.
* I have not used lombok for entity, but prefer to use it( Obvious advantage of to keep code clean if we use lombok)
* I have Used @Autowired for dependency injection. We can even use constructor injection, below are the advantages of constructor injection.
  1. All Required Dependencies Are Available at Initialization Time
  2. The IoC container makes sure that all the arguments provided in the constructor are available before passing them into the constructor. This helps in preventing the infamous NullPointerException
  3. Constructor injection is extremely useful since we do not have to write separate business logic everywhere to check if all the required dependencies are loaded, thus simplifying code complexity.
* For creating a reservation, have used synchronisation so that multiple requests get handled properly.
* All the transaction is taken care by JPA
* Caching - Caching is configurable to run as per the requirement and considering we might need to accommodate extra table based on need. (Other approach is to load cache only during application start up , but in case if there is change in number we have to reboot the server )

**Execution :**

Standard spring boot execution , no external dependencies or jar file needed .