

CSCI5448

RobotPathLearning

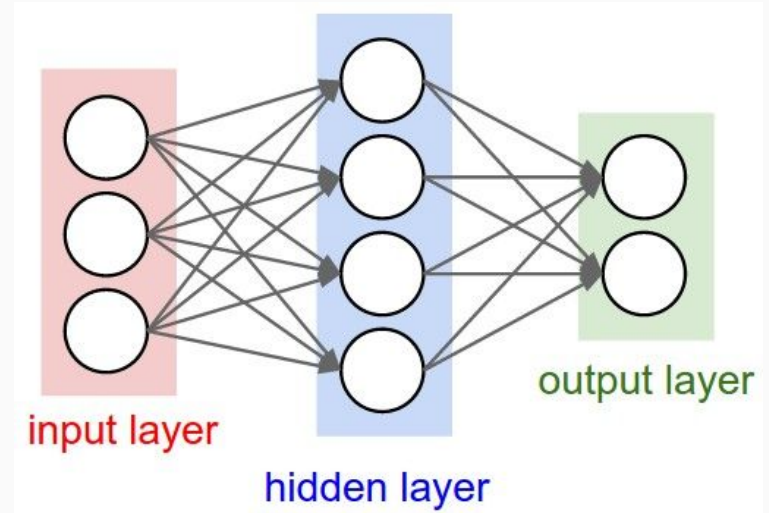
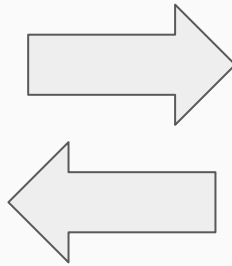
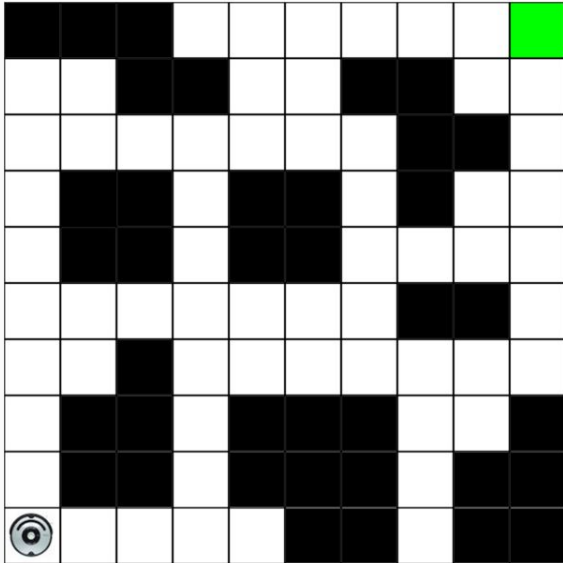
Team13

Bo Cao

Fernando Nobre

Zhongzhi Zhang

Robot Path Learning?



Use Cases

User Case ID:

UR-008

User Case Name:

Replay the path

Description:

User can let the robot move along a previously created path.

Use Cases

User Case ID:

UR-010

User Case Name:

Add obstacle to map

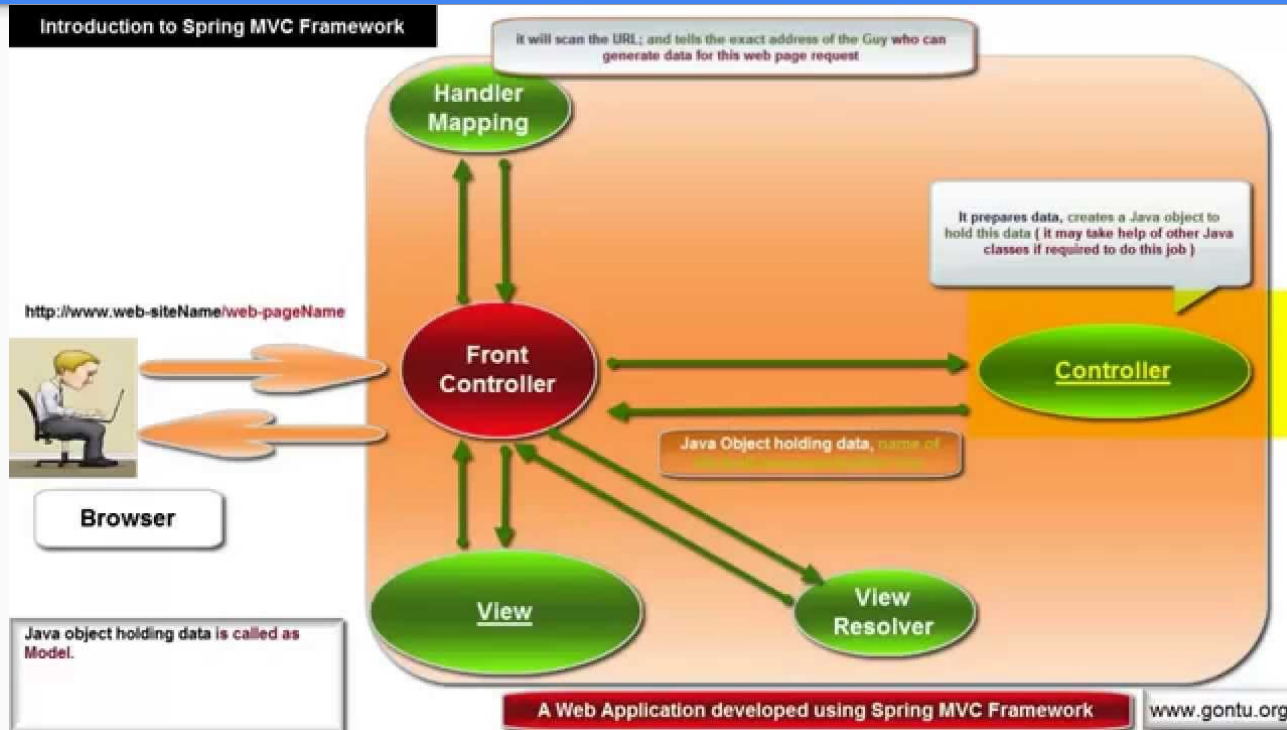
Description:

A User can add an obstacle to the map by clicking on the map.

System Demo



Architecture



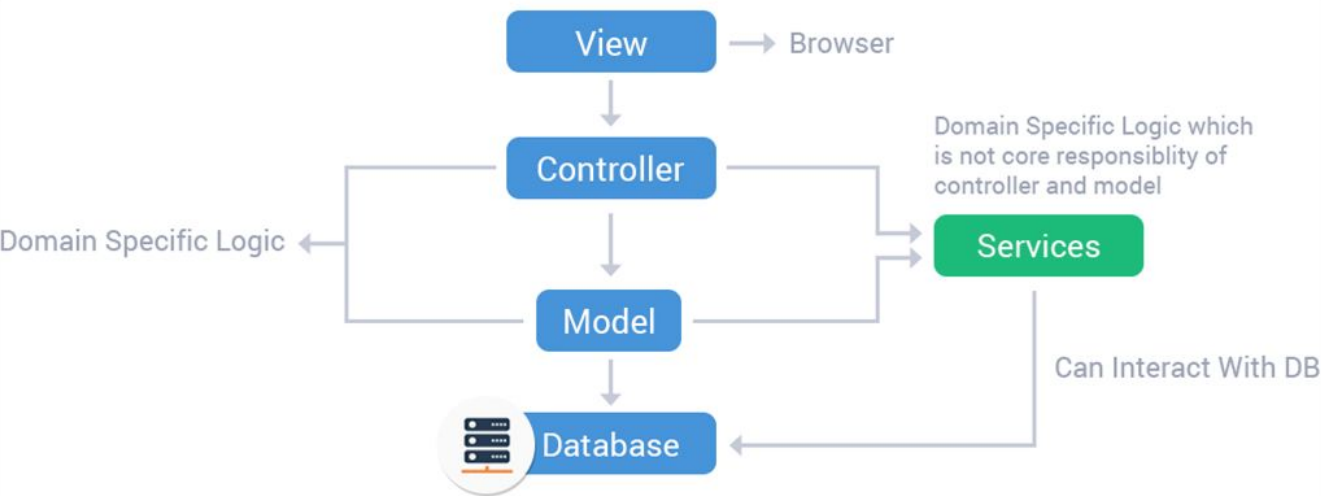
Architecture/Frameworks

- Spring MVC
- Hibernate/MySQL
- jQuery
- Bootstrap
- SiteMesh

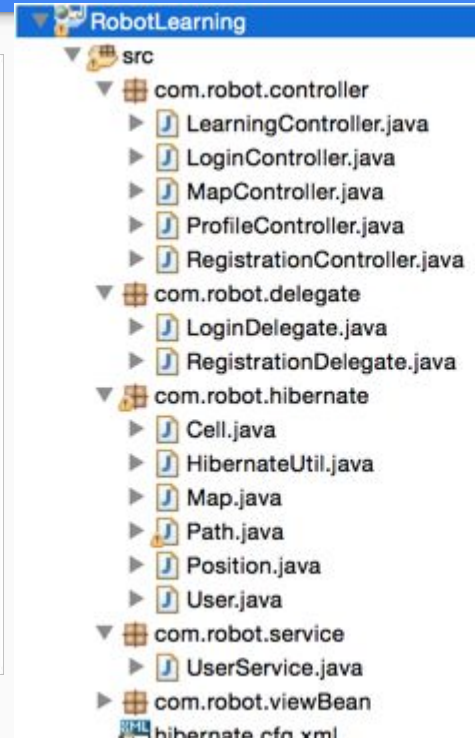
Design Patterns

- Dependency Injection
- Service Layer
 - decoupling and maintainability
 - Writing a web API is easy
 - Controller has no business logic
 - Unit tests are easy
- Decorator
- Observer

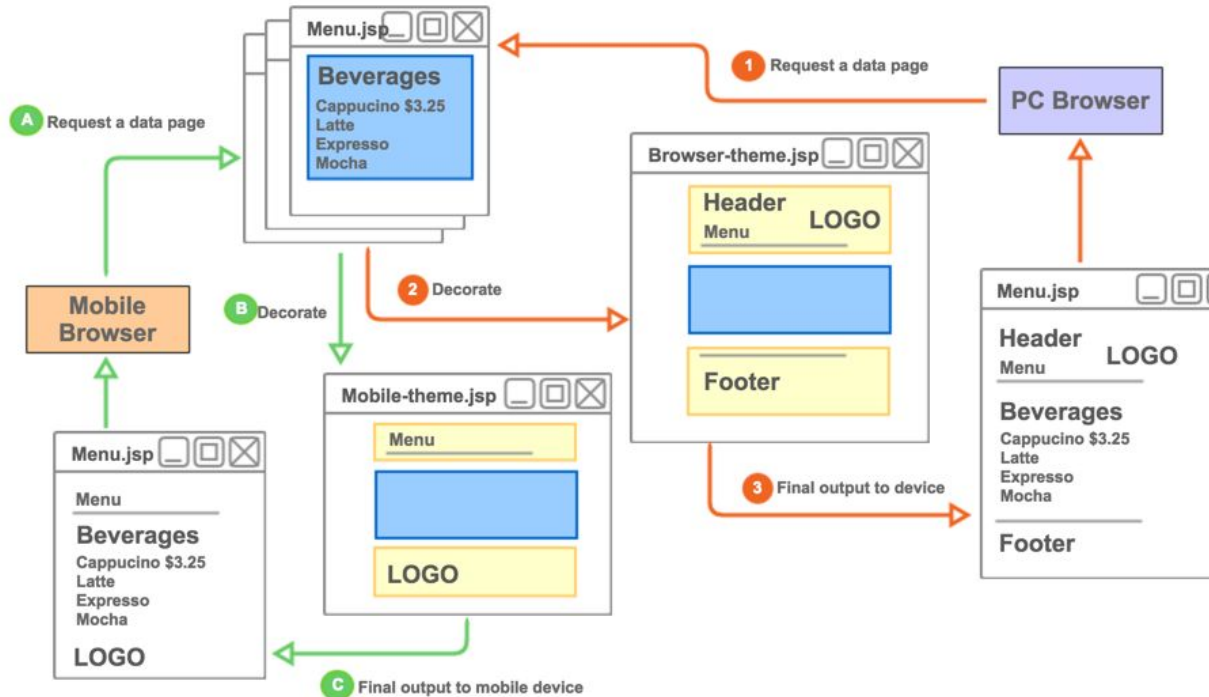
Service Layer



MVC Architecture With Service Layer



Decorator



Demo Video

Github:

https://github.com/BryanBo-Cao/CSCI5448-RobotPathLearning-Team13/blob/master/RobotPathLearning_Video.mov

Youtube:

<https://www.youtube.com/watch?v=gMJwqA66rKk>