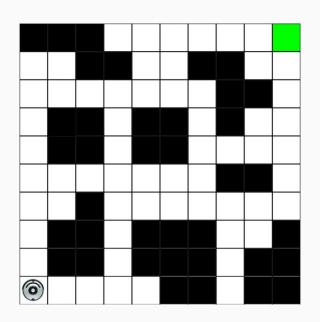
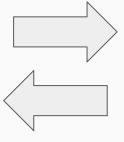
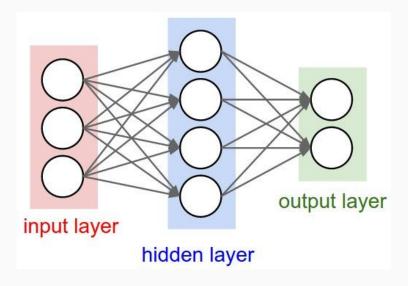
CSCI5448 RobotPathLearning Team13

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

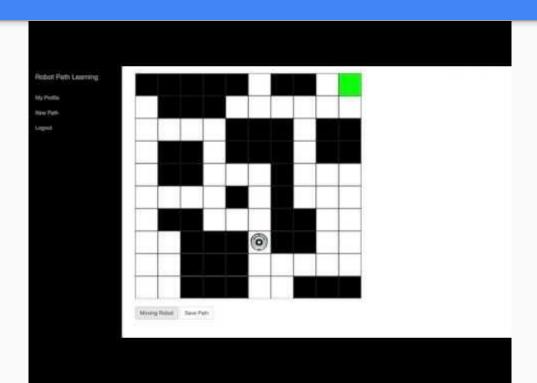
User Case Name:

Add obstacle to map

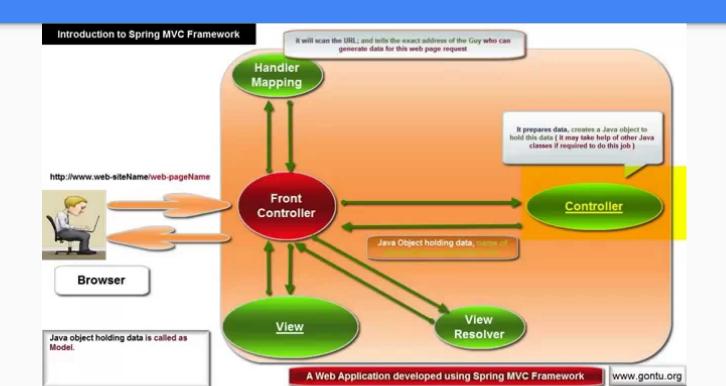
Description:

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

System Demo



Architecture



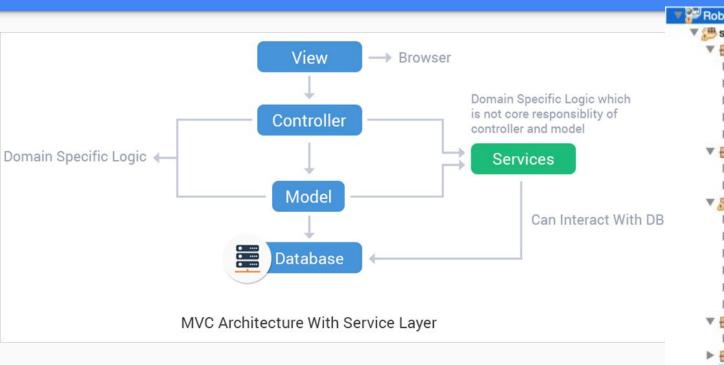
Architecture/Frameworks

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

Design Patterns

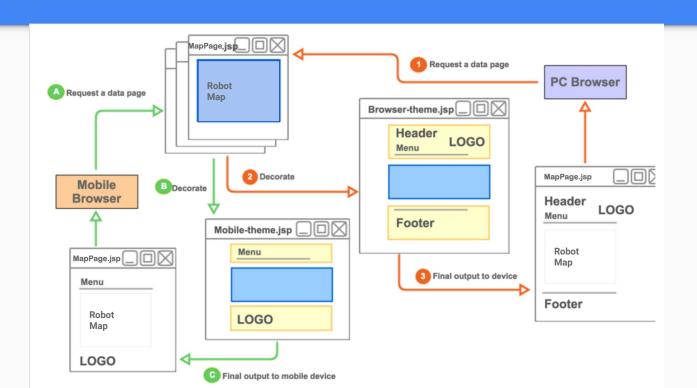
- Dependency Injection
- Service Layer
 - Decoupling and maintainability
 - Writing a web API is easy
 - Controller has no business logic
 - Unit tests are easy
- Decorator
- Observer

Service Layer



RobotLearning ▼ 🌁 src \[
\bigsir \overline{\text{the com.robot.controller}}
\] LearningController.java LoginController.java MapController.java ProfileController.java RegistrationController.java e com.robot.delegate J LoginDelegate.java RegistrationDelegate.java ▼ ♣ com.robot.hibernate ▶ J Cell.java Map.java Path.java Position.java ▶ J User.java ▼ ⊕ com.robot.service UserService.java ▶ ⊕ com.robot.viewBean hibernate of yml

Decorator



Demo Video

Github:

https://github.com/BryanBo-Cao/CSCI5448-RobotPathLearning-Team13/blob/master/RobotPathLearning_Video.mp4

Youtube:

https://youtu.be/3LMuFmSQeUo