# CRUD Application

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# Contents

# Introduction

## Task

Create a CRUD application using supporting tools, methodologies and technologies that have been taught during training.

## Topic

Dog Pound

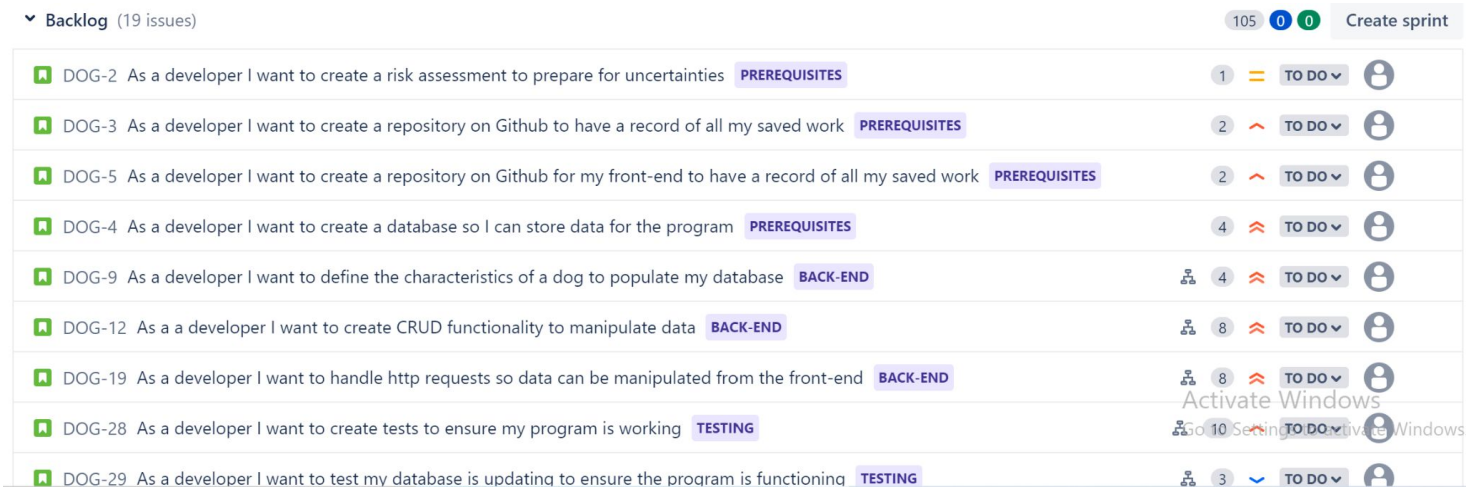
Why dog pound?

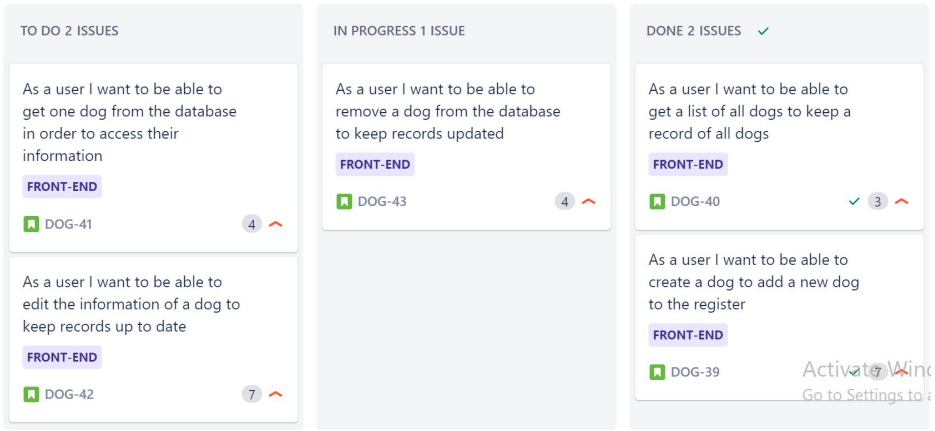
Planning approach

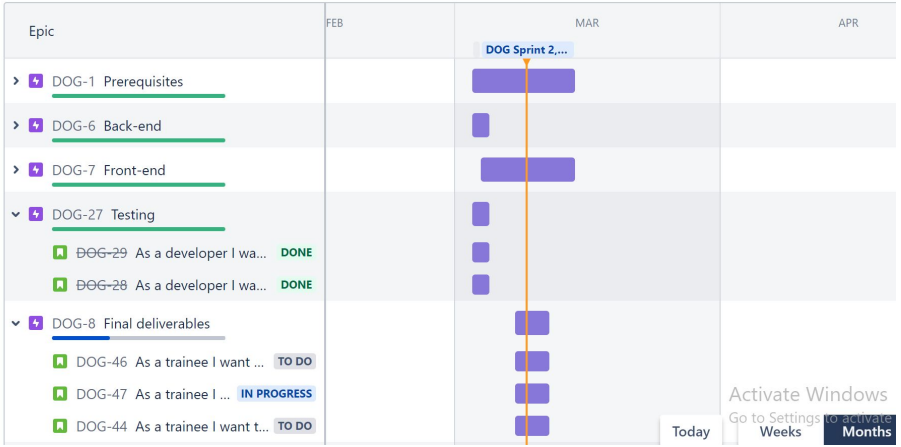
- Main Sections:
    1. Back-End - Business Layer
    2. Database - Persistence Layer
    3. Front-End - Presentation Layer
- Prerequisites:
    - Risk Assessment
    - Jira Board
- Final Deliverables:
    - Documentation
    - Presentation

| Likelihood | Impact | | | | | |
|---|---|---|---|---|---|---|
| | | Negligible **1** | Minor **2** | Moderate **3** | Major **4** | Catastrophic **5** |
| | Almost certain **5** | Moderate **5** | High **10** | Extreme **5** | Extreme **20** | Extreme **25** |
| | Likely **4** | Moderate **4** | High **8** | High **12** | Extreme **16** | Extreme **20** |
| | Possible **3** | Low **3** | Moderate **6** | High **9** | High **12** | Extreme **15** |
| | Unlikely **2** | Low **2** | Moderate **4** | Moderate **6** | High **8** | High **10** |
| | Rare **1** | Low **1** | Low **2** | Low **3** | Moderate **4** | Moderate **5** |

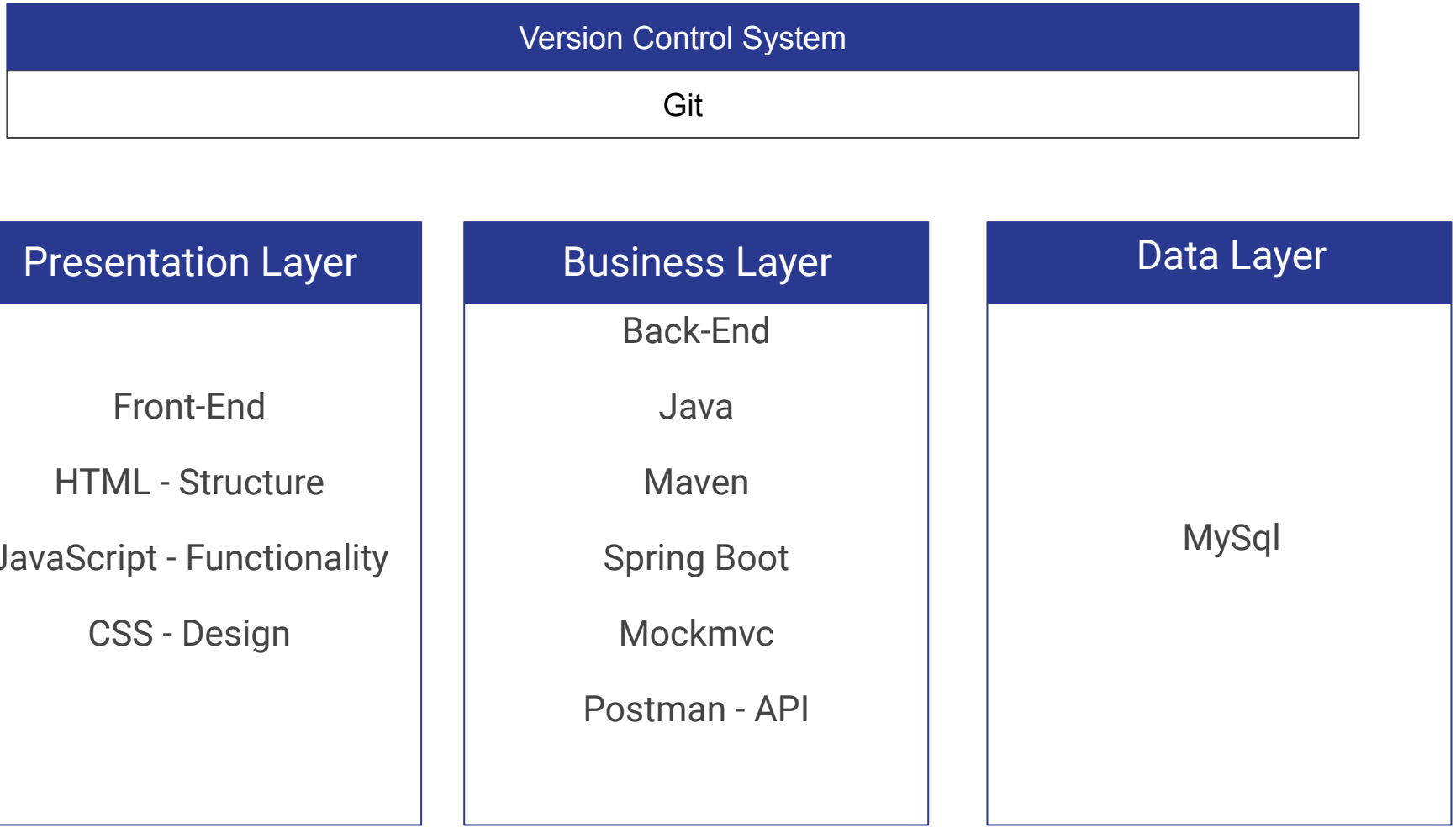
| Risk | Likelihood | Impact | Risk Rating | Preventative Measures | Response |
|---|---|---|---|---|---|
| Run out of time | 4 | 3 | 12 | Complete tasks with higher prioritisation first and start tasks with higher story points earlier. Refer to kanban board | Complete the tasks for all user stories that you can with the time you have left. If you ran out of time due to personal or unforeseen circumstances, talk to project trainer |
| Loss of files | 2 | 4 | 8 | Push all files and commits to your Github repository regularly as well as always saving files | Use last saved peice of work or most recent work from Github to build your code/databases again |
| Poor quality code | 3 | 2 | 6 | Test code frequently and use best pratises learnt throughout the Java teaching | Resolve bugs and logical errors when they're found |
| Low productivity | 5 | 2 | 10 | Set goals during the project using the SMART technique | Take time away from the project to clear your mind and come back to it feeling fresh |
| Inaccurate estimations | 4 | 4 | 16 | Focus on the work that has immediate priority.<br>Include techspikes - allocated time to research an unfamiliar part of the project | Work on projeect out of training hours.<br>Talk to the project trainer and explain the circumstances |
| Poor risk management | 2 | 2 | 4 | Identify potential risks and the likelihood of them.<br>Create risk mitigation plans and carefully monitor the risks | Create a risk assessment upon the first encounter with a risk in order to prevent any other risks from occuring or taking too much time out of the project |


Backlog (19 issues)
105 0 0
Create sprint
DOG-2 As a developer I want to create a risk assessment to prepare for uncertainties PREREQUISITES 1 TO DO
DOG-3 As a developer I want to create a repository on Github to have a record of all my saved work PREREQUISITES 2 TO DO
DOG-5 As a developer I want to create a repository on Github for my front-end to have a record of all my saved work PREREQUISITES 2 TO DO
DOG-4 As a developer I want to create a database so I can store data for the program PREREQUISITES 4 TO DO
DOG-9 As a developer I want to define the characteristics of a dog to populate my database BACK-END 4 TO DO
DOG-12 As a a developer I want to create CRUD functionality to manipulate data BACK-END 8 TO DO
DOG-19 As a developer I want to handle http requests so data can be manipulated from the front-end BACK-END 8 TO DO
DOG-28 As a developer I want to create tests to ensure my program is working TESTING 10 TO DO
DOG-29 As a developer I want to test my database is updating to ensure the program is functioning TESTING 3 TO DO
Activate Windows
Go to Settings to activate Windows


TO DO 2 ISSUES
As a user I want to be able to get one dog from the database in order to access their information
FRONT-END
DOG-41 4
As a user I want to be able to edit the information of a dog to keep records up to date
FRONT-END
DOG-42 7
IN PROGRESS 1 ISSUE
As a user I want to be able to remove a dog from the database to keep records updated
FRONT-END
DOG-43 4
DONE 2 ISSUES
As a user I want to be able to get a list of all dogs to keep a record of all dogs
FRONT-END
DOG-40 3
As a user I want to be able to create a dog to add a new dog to the register
FRONT-END
DOG-39 7
Activate Windows
Go to Settings to activate


Epic
FEB
MAR
APR
DOG Sprint 2,...
DOG-1 Prerequisites
DOG-6 Back-end
DOG-7 Front-end
DOG-27 Testing
DOG-29 As a developer I wa... DONE
DOG-28 As a developer I wa... DONE
DOG-8 Final deliverables
DOG-46 As a trainee I want ... TO DO
DOG-47 As a trainee I ... IN PROGRESS
DOG-44 As a trainee I want t... TO DO
Today
Weeks
Months
Activate Windows
Go to Settings to activate

# Technologies/Supporting Tools


Version Control System
Git
Presentation Layer
Front-End
HTML - Structure
JavaScript - Functionality
CSS - Design
Business Layer
Back-End
Java
Maven
Spring Boot
Mockmvc
Postman - API
Data Layer
MySql

# Improvements

- Push changes to github more frequently
- Create more readable/ordered code in HTML and JavaScript files

# Demonstration

# Summary

# What went well?

- Core fundamentals
- Use of Github
- Approach to planning

# What didn’t go well?

- Jira board
- Best practice

# What could be done differently?

- More focus on user-friendliness
- Creativity

# What have I learnt?

- Three tier architecture
- API
- Improved confidence in functional coding