

baeprojectone

- Author Clare Pritchard
- Chose to start with the simplest minimum viable product
- A 'todo' list with
 - Name of thing todo
 - Description of the task
 - Priority of task (with the user completely free to define this)

baeprojectone

A ToDo List

- Persistence Layer mySQL server 8
- Backend Java, Maven, Springboot framework
- Frontend HTML/JavaScript/css (axios and bootstrap libraries)

Baeprojectone – planning – the approach

- Plan project, risk assessment, set up Jira(scrum) backlog and sprint
- Back end – java springboot application
- Test and production persistence layer (databases)
- Check it works using postman(because this is a very small app)
- Front End – html page with javascript and css support
- Test it works from my new gui
- Write integration and unit tests

Baeprojectone – planning – backlog and sprint

The screenshot displays the Jira Software interface for a project named 'BAEProjectOne'. The interface is divided into several sections:

- Left Sidebar:** Contains navigation links for 'Roadmap', 'Backlog', 'Board', 'Code', 'Project pages', 'Add shortcut', and 'Project settings'. A message at the bottom states 'You're in a team-managed project' with a 'Learn more' link.
- Top Bar:** Includes the 'Jira Software' logo, navigation tabs ('Your work', 'Projects', 'Filters', 'Dashboards', 'People', 'Apps'), and a 'Create' button. A search bar is located on the right.
- Main Content Area:**
 - Backlog View:** Shows a list of issues under the 'BAEP Sprint 1' header. Issues are categorized by type (e.g., Documentation, Frontend, Backend, Testing) and progress bars. A '+ Create issue' button is visible.
 - Sprint View:** Displays a detailed view of 'BAEP Sprint 1' (25 Apr – 29 Apr) with 22 issues. Each issue card shows its title, type, priority, and status (e.g., 'IN PROGRESS', 'DONE').
 - Issue Details Panel:** On the right, a detailed view of issue 'BAEP-16' is shown. It includes a description: 'A presentation to last 15 minutes, a copy of which should be stored in pdf format in the documentation folder'. The 'Details' section shows the assignee as 'clare pritchard', priority as 'Medium', and sprint as 'BAEP Sprint 1'.

Baeprojectone – planning – backlog and sprint

- Create logical epics of related user stories
- Try to order the user stories in the same order that they will be tackled
- Split user stories into tasks (link tasks to user stories)
- Give issues descriptions, priority and storypoint estimations
- Load all issues into a time boxed sprint
- Start sprint

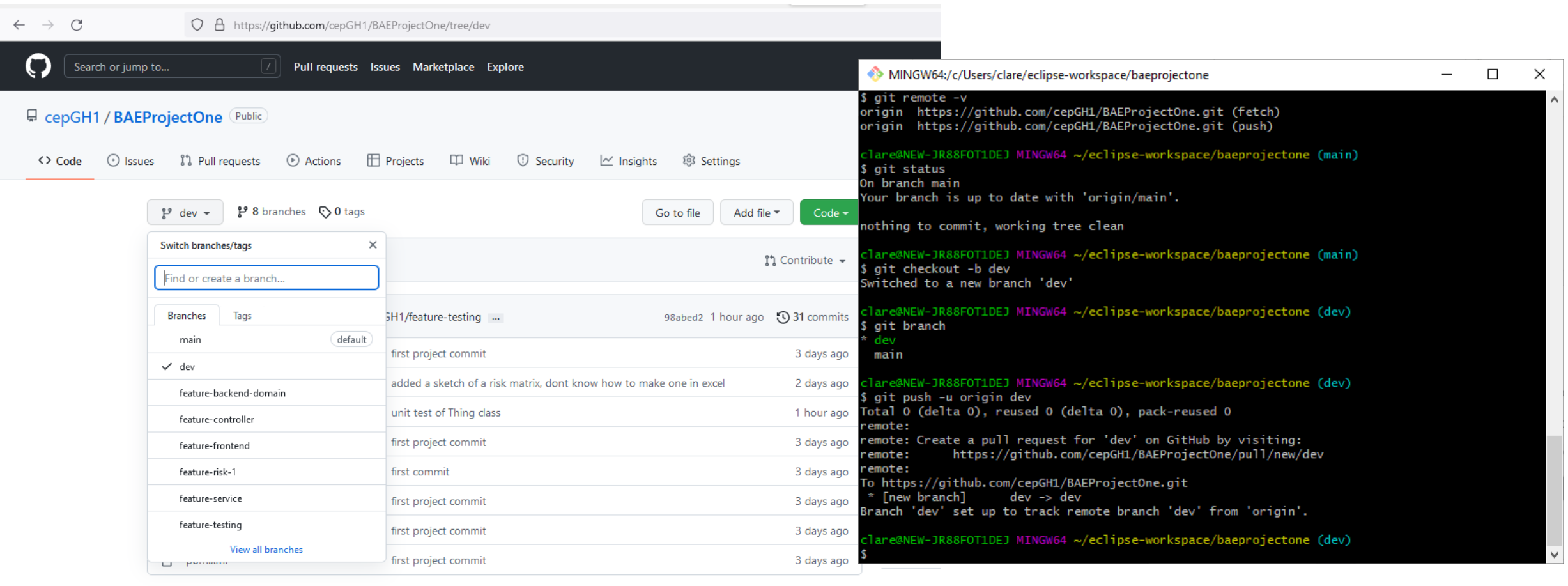
This should act as a todo list. Should ensure that no steps are missing and help to get to MVP.

Baeprojectone – what I learned

- The most major thing I learned was the use of axios to create and receive http requests carrying JSON payloads.
- Also learned lots about javascript and html dom manipulation
- Revised and reinforced what I knew about SpringBoot, maven
- Made me realise how little I knew about html/javascript
- Introduced me to bootstrap(I want to get to know this much better)

Baeprojectone – Version Control

- Git and GitHub
- Using main, dev and feature branches



The image shows a GitHub repository page for 'cepGH1 / BAEProjectOne' and a terminal window displaying Git commands and their output.

GitHub Repository Page:

- URL: <https://github.com/cepGH1/BAEProjectOne/tree/dev>
- Repository: cepGH1 / BAEProjectOne (Public)
- Navigation: <> Code, Issues, Pull requests, Actions, Projects, Wiki, Security, Insights, Settings
- Branches: 8 branches, 0 tags
- Current branch: dev (selected)
- Branch list (sorted by latest commit):

Branch	Commit	Time ago
main	98abed2	1 hour ago
dev	first project commit	3 days ago
feature-backend-domain	added a sketch of a risk matrix, dont know how to make one in excel	2 days ago
feature-controller	unit test of Thing class	1 hour ago
feature-frontend	first project commit	3 days ago
feature-risk-1	first commit	3 days ago
feature-service	first project commit	3 days ago
feature-testing	first project commit	3 days ago

Terminal Window (MINGW64):

```
$ git remote -v
origin  https://github.com/cepGH1/BAEProjectOne.git (fetch)
origin  https://github.com/cepGH1/BAEProjectOne.git (push)

clare@NEW-JR88F0T1DEJ MINGW64 ~/eclipse-workspace/baeprojectone (main)
$ git status
On branch main
Your branch is up to date with 'origin/main'.
nothing to commit, working tree clean

clare@NEW-JR88F0T1DEJ MINGW64 ~/eclipse-workspace/baeprojectone (main)
$ git checkout -b dev
Switched to a new branch 'dev'

clare@NEW-JR88F0T1DEJ MINGW64 ~/eclipse-workspace/baeprojectone (dev)
$ git branch
* dev
  main

clare@NEW-JR88F0T1DEJ MINGW64 ~/eclipse-workspace/baeprojectone (dev)
$ git push -u origin dev
Total 0 (delta 0), reused 0 (delta 0), pack-reused 0
remote:
remote: Create a pull request for 'dev' on GitHub by visiting:
remote:   https://github.com/cepGH1/BAEProjectOne/pull/new/dev
remote:
To https://github.com/cepGH1/BAEProjectOne.git
 * [new branch]      dev -> dev
Branch 'dev' set up to track remote branch 'dev' from 'origin'.

clare@NEW-JR88F0T1DEJ MINGW64 ~/eclipse-workspace/baeprojectone (dev)
$
```

Baeprojectone – Testing

- Integration testing using mock mvc
- Unit testing using Mockito

The screenshot shows the Eclipse IDE interface. The top part displays the Package Explorer on the left with a tree view of test classes. The main editor shows the source code of `ThingControllerUnitTest.java`, which includes integration tests using `Mockito` and `Mvc` to simulate HTTP requests and responses. The bottom part of the IDE shows the Console and Coverage views.

Test Results Summary:

Test Class	Test Method	Duration (s)	Status
ThingTest	getByIdTest()	0.489	Pass
	updateTest()	0.148	Pass
	getAllTest()	0.346	Pass
	createTest()	0.058	Pass
	deleteTest()	0.069	Pass
ThingControllerUnitTest	deleteFailTest()	0.045	Pass
	getByIdTest()	0.014	Pass
	updateTest()	0.010	Pass
	getAllTest()	0.010	Pass
	createTest()	0.012	Pass
BaeprojectoneApplicationTests	constructorTest()	0.011	Pass
	constructorTest()	0.006	Pass

Coverage Report:

Element	Coverage	Covered Instructions	Missed Instructions	Total Instructions
baeprojectone	63.0 %	605	356	961
src/test/java	58.3 %	378	270	648
src/main/java	72.5 %	227	86	313
com.qa.main.domain	62.2 %	97	59	156
Thing.java	62.2 %	97	59	156
com.qa.main.service	77.5 %	69	20	89
com.qa.main	37.5 %	3	5	8
com.qa.main.controller	96.7 %	58	2	60

Demo

Baeprojectone – Sprint Review

- Completed all of my (not very ambitious) sprint issues
- Would like better test coverage

Baeprojectone – Sprint retrospective

- The Front End could be improved a lot
 - Adding interactivity to my overall list
- Version 2 of this project would include a deadline date in the entity and javascript to show how close to deadline the item is. (amongst other features)

Baeprojectone – Conclusion

- I could have been more ambitious with my entity, used more columns in my table and demonstrated that I do know what other data-types can be held in a MySQL schema
- This is very good practice for using springboot
- I particularly need to practise with bootstrap and javascript Dom methods.