

The background is a light cream color with a repeating pattern of stylized, colorful dinosaurs and plants. The dinosaurs include a green long-necked dinosaur, a purple Triceratops, an orange T-Rex, a red Stegosaurus, a blue long-necked dinosaur, and a pink Pterosaur. There are also green leaves and blue eggs scattered throughout. A white rectangular box with a thin grey border is centered on the page.

Triassic Park Spring Boot API



Hello!

My name is Jools Arts, and I'm here to walk you through a demonstration of my paleontology themed Spring Boot API

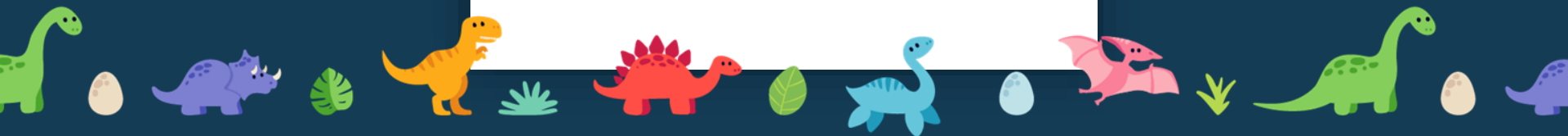
I hope you enjoy the presentation!

You can find me at jools.arts@gmail.com



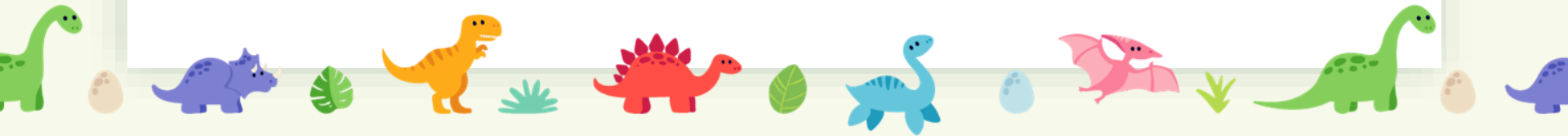
The background is a dark blue field filled with various colorful, cartoon-style dinosaurs and plants. In the top row, from left to right, there is a pink pterosaur, a green long-necked dinosaur, a purple triceratops, a green monstera leaf, an orange T-Rex, a light blue egg, and a red Stegosaurus. The middle row features a red Stegosaurus on the left and a light blue long-necked dinosaur on the right. The bottom row includes an orange T-Rex, a green long-necked dinosaur, a light blue egg, a light blue long-necked dinosaur, a purple triceratops, a green grass tuft, an orange T-Rex, a pink pterosaur, and a green monstera leaf. A large, light yellow rectangular box is centered in the middle of the slide.

1. Introduction





Insert image of website here



The background is a dark blue field filled with various colorful, cartoon-style dinosaurs and plants. In the top row, from left to right, there is a pink Pterosaur, a green long-necked dinosaur, a purple Triceratops, a green Monstera leaf, an orange T-Rex, a light blue egg, and a red Spinosaurus. The middle row features a red Stegosaurus on the left and a light blue long-necked dinosaur on the right. The bottom row includes an orange T-Rex, a green long-necked dinosaur, a light blue egg, a light blue long-necked dinosaur, a purple Triceratops, a green grass tuft, an orange T-Rex, a pink Pterosaur, and a green Monstera leaf.

2. Risk Assessment

Here's my completed risk assessment!

Risk Assessment						
Description	Evaluation	Likelihood	Impact Level	Responsibility	Response	Control Measures
1. When an event when committing changes to the application via the Git Bash terminal.	Could result in lost committed version of the application being pushed up to the GitHub repository.	High	Medium	Myself	I would either have to increase the time from commit, or I would have to access a backup from which I would be able to restore the application to its previous state, prior to the changes being committed and pushed up to the relevant GitHub repository.	First, I would perform a test commit that would include adding, committing, and pushing a variety of test data to the GitHub repository to ensure I was performing all of the necessary steps in the correct order. Once I had established the method of committing changes was working as expected, I would create a working backup of my application and store the file either within a cloud storage solution, or in another cloud disk which would ensure the security of the application, even if an error were to occur during the process of pushing the changes to GitHub.
2. Incomplete connection to the relevant database within the MySQL Workbench application.	Could result in the final build of the application being unable to access the relevant data that is required to make entries such as photographs, user data, and reviews.	High	High	Myself	I would either have to troubleshoot the connection between the existing database within MySQL Workbench and my Spring Boot application in an attempt to maximize functionality, or I would have to create an entirely new database, perform a test to ensure my Spring Boot application would be able to connect to it, and transfer the data from the database that is of the newly created database.	I am attempt to prevent such events from transpiring, before inserting data into the tables created within the MySQL application. I would first ensure the connection to my Spring Boot application was live and stable by creating a test that included a very strict protocol of test data that would be used to confirm whether data was able to be retrieved successfully. This will prevent a loss of development time and resources should an error in establishing a successful connection occur during the initial development phase.
3. The servers that support the GitHub platform could experience technical difficulties and go down for a period of time.	Could result in any changes that I make to my Spring Boot application/MySQL database being unable to be pushed to my GitHub repository, resulting in the only version of my Spring Boot API that I am able to push to is an incomplete nature.	Low	High	GitHub/ GitHub's cloud provider	I would have to archive all of the changes I had made to my application, so until that point had been saved locally to my machine in alternative, or an alternative cloud storage provider. From there, if further development on my team wanted to access the work I had completed up until that point, they would either have to restore the file via email which would not be very useful, or I would have to transfer the relevant files to a drive and physically deliver them to the holder.	Although my ability to control the events that directly affect GitHub are rather limited, I could make efforts to ensure all of my files are updated, and backed up locally. By doing this, I could probably avoid them to an alternative cloud storage development repository, although this measure would have to be done occasionally with it. For example, the relative security of the aforementioned repository service may not have been fully verified to the extent that GitHub has. Therefore, the last course of action may be to exchange that locally, although this method of addressing the issue may not be suitable for large companies that operate at a national or even international level.
4. Both the JUnit and Mockito testing processes could highlight some unforeseen errors that I was not expecting.	Could result in additional time needing to be allocated for the project in order for the bugs, errors, and exceptions that are likely to be thrown up by the testing process, to be addressed.	High	Medium	Myself	I would allocate a period of time for any errors that were thrown up as a result of the JUnit and Mockito testing processes. In a scenario in which we were tasked to conduct a Spring Boot API as a task, I might even be inclined to delegate the process to a specific sub team as they would be able to troubleshoot the application that I have completed, having not previously worked on the code. Sometimes having a team just of the relevant members of the team, or an issue or even a solution you may not have thought of prior. This is particularly relevant when discussing regular errors.	As the sole developer on this project, it is my responsibility to manage time appropriately to ensure there is a subset within a certain area for a subset with the application that may be highlighted as a result of the JUnit and Mockito tests. Within the professional working environment, unforeseen issues are often a common occurrence within the sector however, it is ultimately the responsibility of the developer to make the issue aware to the relevant manager, and to look for an extension to the deadline to allow for more time to work on the project, or to commit to a period of time within the development cycle that is utilized solely for addressing bugs and errors within the code.
5. As the sole developer working on my personal inventory management system, there is an acute risk of the system being lost and being unable to complete the work required of me to a suitable standard.	Could result in the project not being submitted within the agreed deadline, or potentially submitted without thorough testing having been completed, which may result in a product being delivered that is riddled with bugs in its current state.	Low	Medium	Myself	If I was working within a professional environment that usually required me to hand in my work to complete my work, then my risk due to security concerns regarding equipment and resources subject to may be in the manager if it would be possible to work from home for a brief period of time. This may include bases that are secured as non-sensitive in regards to security.	In terms of limiting the risk of my committing code to the system, I am confident that I am taking sufficient care to ensure that the system is secure, as I am a security professional. This reduces the risk of committing code to the system, and should result in the project being completed as scheduled.



Risk Assessment							
	Description	Evaluation	Likelihood	Impact Level	Responsibility	Response	Control Measures
1.	Make an error when committing changes to the application via the Git Bash terminal.	Could result in an incorrect version of the application being pushed up to the GitHub repository.	High	Medium	Myself	I would either, have to recreate the files from scratch, or I would have to access a backup from which I would be able to restore the application to its previous state, prior to the changes being committed and pushed up to the relevant GitHub repository.	First, I would perform a test commit that would include adding, committing, and pushing a sample .txt file up to the GitHub repository to ensure I was performing all of the necessary steps in the correct order. Once I had established the method of committing changes was working as expected, I would create a working backup of my application and store the files either, within a cloud storage solution, or via another drive locally which would ensure the security of the application, even if an error were to occur during the process of pushing the changes to GitHub.

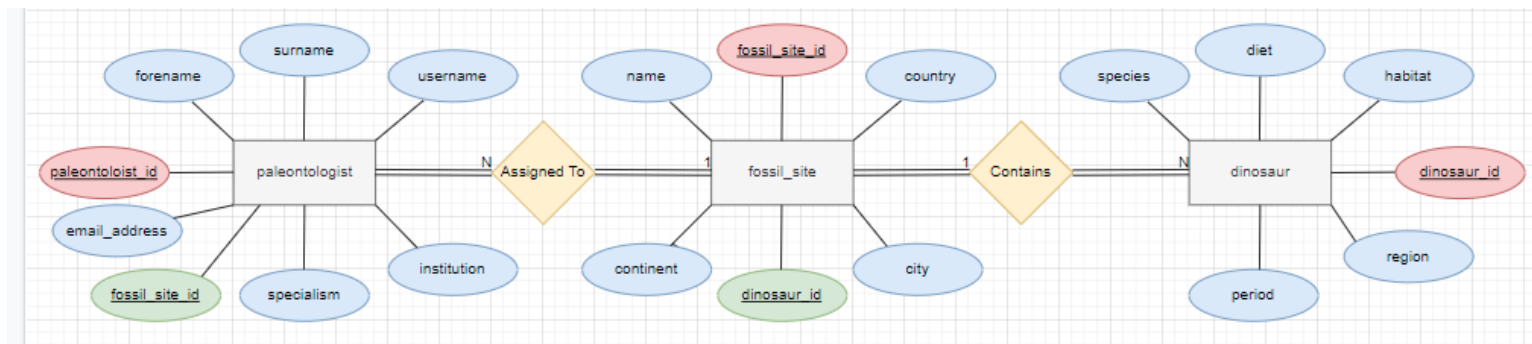


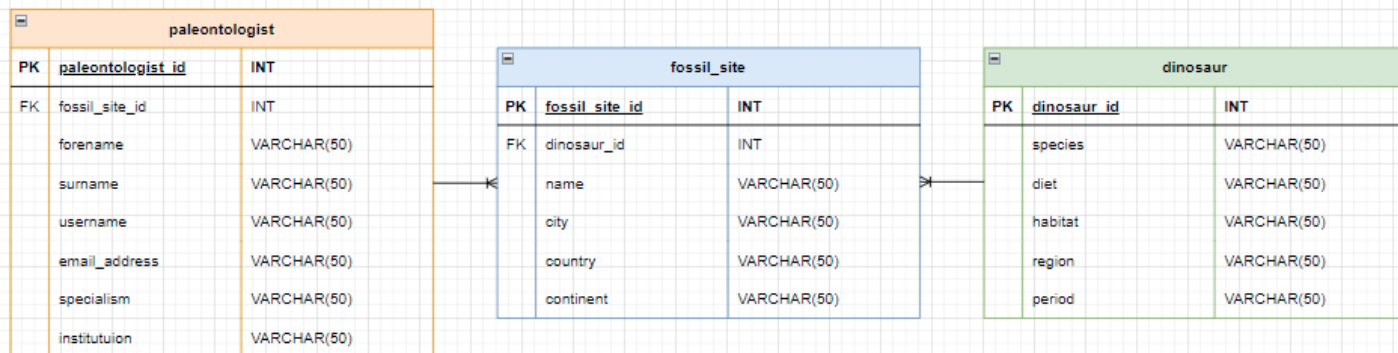
3	The servers that support the GitHub platform could experience technical difficulties and go down for a period of time.	Could result in any changes that I make to my Sprint Boot application/MySQL database being unable to be uploaded to my GitHub repository, resulting in the only version of my Sprint Boot API that is able to be pulled is that of an incomplete nature.	Low	High	GitHub/ GitHub's cloud provider	I would have to ensure all of the changes I had made to my application up until that point had been saved locally to my machine or alternatively, to an alternative cloud service provider. From there, if another developer on my team wanted to access the work I had completed up until that point, they would either have to receive the files via email which would not be very secure, or I would have to transfer the relevant files to a drive and physically deliver them to him/her.	Although my ability to control the events that directly affect GitHub are rather limited, I could make efforts to ensure all of my files are updated, and backed up locally. By doing this, I could possibly upload them to an alternative open source development repository. Although, this response would have its own risks associated with it. For example, the relative security of the alternative repository service may not have been fully verified to the extent that GitHub has. Therefore, the best course of action may be to exchange files locally, although this method of addressing the issue may not be suitable for large companies that operate at a national or even international level.
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3. Diagrams







4. Sprint Plan

HWA board

Q JA Epic ▾

TO DO 3 ISSUES

Create Fully Designed Test Suites For The Application

[CREATE AN OOP-BASED WEB APPL...](#)

☒ HWA-10

JA

Create Fully Automated Tests For Validation Of The Application

[CREATE AN OOP-BASED WEB APPL...](#)

☒ HWA-11

JA

Run The Relevant Code Through A Static Analysis Tool

[CREATE AN OOP-BASED WEB APPL...](#)

☒ HWA-8

JA

+ Create issue

IN PROGRESS 2 ISSUES

Produce A Build Of Your Application (Using An Integrated Build Tool)

[CREATE AN OOP-BASED WEB APPL...](#)

☒ HWA-7

JA

Create A Functional 'Front-End' Website Which Connects To Your Back-End API

[CREATE AN OOP-BASED WEB APPL...](#)

☒ HWA-9

JA

DONE 5 ISSUES ✓

Create A Project Management Board With Full Expansion On User Stories

[CREATE AN OOP-BASED WEB APPL...](#)

☒ HWA-3

✓ JA

Create A Relational Database To Persist Data For The Project

[CREATE AN OOP-BASED WEB APPL...](#)

☒ HWA-4

✓ JA

Fully Integrate Code Into A Version Control System Using The Feature Branch Model

[CREATE AN OOP-BASED WEB APPL...](#)

☒ HWA-2

✓ JA

Create A Risk Assessment Which Outlines The Issues And Risks Faced During The Project Timeframe

[CREATE AN OOP-BASED WEB APPL...](#)

☒ HWA-5

✓ JA

The background is a dark blue field filled with various colorful, cartoon-style dinosaur illustrations. These include a pink Pterosaur in the top left, a green long-necked dinosaur in the top center, a purple Triceratops in the top center-right, an orange T-Rex in the top right, a red Stegosaurus on the middle left, a blue long-necked dinosaur on the middle right, an orange T-Rex on the bottom left, a green long-necked dinosaur on the bottom right, a blue long-necked dinosaur in the bottom left, a purple Triceratops in the bottom center, and an orange T-Rex in the bottom right. There are also several light blue eggs and green plants scattered throughout the scene.

5. Consultant Journey



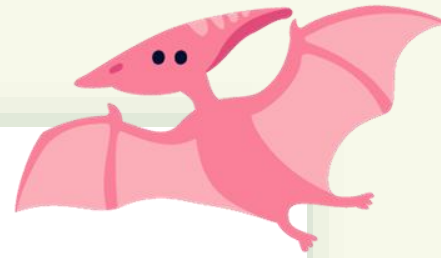
Technologies learned
for the project!





6. Continuous Integration

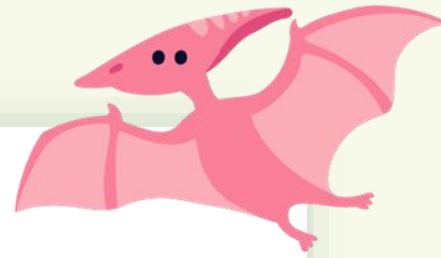
Use of Git and GitHub



```
MINGW64:/c/Users/jools/eclipse-workspace/HobbyWebApplication
jools@86W60W2 MINGW64 ~/eclipse-workspace/HobbyWebApplication (feature-branch-4)
$ git branch -a
  developer
  feature-branch-1
  feature-branch-2
  feature-branch-3
* feature-branch-4
  main
remotes/origin/developer
remotes/origin/feature-branch-1
remotes/origin/feature-branch-2
remotes/origin/feature-branch-3
remotes/origin/feature-branch-4
remotes/origin/main

jools@86W60W2 MINGW64 ~/eclipse-workspace/HobbyWebApplication (feature-branch-4)
$ |
```

Use of Git and GitHub



feature-branch-4 had recent pushes about 1 hour ago [Compare & pull request](#)

feature-branch... 6 branches 0 tags [Go to file](#) [Add file](#) [Code](#)

This branch is 44 commits ahead of main. [Contribute](#)

jools-arts Updated my chen diagram with more detail in regards to the foreign ke... ecda8fb 1 hour ago 45 commits

mvnw/wrapper	Created Paleontologist Java class	4 days ago
documentation	Updated my chen diagram with more detail in regards to the foreign ke...	1 hour ago
src	Added a createDinosaur method to my DinosaurController class	7 hours ago
.gitignore	Created Paleontologist Java class	4 days ago
mvnw	Created Paleontologist Java class	4 days ago
mvnw.cmd	Created Paleontologist Java class	4 days ago
pom.xml	Added the ModelMapper dependency to my POM file as well as implem...	2 days ago

Help people interested in this repository understand your project by adding a README. [Add a README](#)

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6. Demonstration



7. Sprint Review

HWA board

Search: | IA | Epic ▾

TO DO 3 ISSUES	IN PROGRESS 2 ISSUES	DONE 5 ISSUES ✓
<p>Create Fully Designed Test Suites For The Application</p> <p>CREATE AN OOP-BASED WEB APPL...</p> <p><input checked="" type="checkbox"/> HWA-10 10</p>	<p>Produce A Build Of Your Application (Using An Integrated Build Tool)</p> <p>CREATE AN OOP-BASED WEB APPL...</p> <p><input checked="" type="checkbox"/> HWA-7 10</p>	<p>Create A Project Management Board With Full Expansion On User Stories</p> <p>CREATE AN OOP-BASED WEB APPL...</p> <p><input checked="" type="checkbox"/> HWA-3 ✓ 10</p>
<p>Create Fully Automated Tests For Validation Of The Application</p> <p>CREATE AN OOP-BASED WEB APPL...</p> <p><input checked="" type="checkbox"/> HWA-11 10</p>	<p>Create A Functional 'Front-End' Website Which Connects To Your Back-End API</p> <p>CREATE AN OOP-BASED WEB APPL...</p> <p><input checked="" type="checkbox"/> HWA-9 10</p>	<p>Create A Relational Database To Persist Data For The Project</p> <p>CREATE AN OOP-BASED WEB APPL...</p> <p><input checked="" type="checkbox"/> HWA-4 ✓ 10</p>
<p>Run The Relevant Code Through A Static Analysis Tool</p> <p>CREATE AN OOP-BASED WEB APPL...</p> <p><input checked="" type="checkbox"/> HWA-8 10</p> <p>+ Create issue</p>		<p>Fully Integrate Code Into A Version Control System Using The Feature Branch Model</p> <p>CREATE AN OOP-BASED WEB APPL...</p> <p><input checked="" type="checkbox"/> HWA-2 ✓ 10</p>
		<p>Create A Risk Assessment Which Outlines The Issues And Risks Faced During The Project Timeframe</p> <p>CREATE AN OOP-BASED WEB APPL...</p> <p><input checked="" type="checkbox"/> HWA-5 ✓ 10</p>

- Majority of tasks completed bar testing

The background is a dark blue field filled with various colorful, cartoon-style illustrations of dinosaurs and prehistoric plants. In the top left, there's a pink Pterosaur. To its right is a green long-necked dinosaur (Brachiosaurus). Further right is a purple Triceratops. In the top right corner is an orange T-Rex. Below the Pterosaur on the left is a red Stegosaurus. In the bottom left is another orange T-Rex. At the bottom center is a purple Triceratops. To its right is an orange T-Rex. In the bottom right is a pink Pterosaur. Various other dinosaurs like a blue long-necked dinosaur (Diplodocus) and a green long-necked dinosaur (Brachiosaurus) are scattered throughout. There are also several light blue eggs and green plants (like Monstera leaves and small tufts of grass) interspersed among the dinosaurs.

7. Sprint Retrospective

HWA board

Search: [] | IA | Epic ▾

TO DO 3 ISSUES	IN PROGRESS 2 ISSUES	DONE 5 ISSUES ✓
<p>Create Fully Designed Test Suites For The Application</p> <p>CREATE AN OOP-BASED WEB APPL...</p> <p><input checked="" type="checkbox"/> HWA-10</p>	<p>Produce A Build Of Your Application (Using An Integrated Build Tool)</p> <p>CREATE AN OOP-BASED WEB APPL...</p> <p><input checked="" type="checkbox"/> HWA-7</p>	<p>Create A Project Management Board With Full Expansion On User Stories</p> <p>CREATE AN OOP-BASED WEB APPL...</p> <p><input checked="" type="checkbox"/> HWA-3</p>
<p>Create Fully Automated Tests For Validation Of The Application</p> <p>CREATE AN OOP-BASED WEB APPL...</p> <p><input checked="" type="checkbox"/> HWA-11</p>	<p>Create A Functional 'Front-End' Website Which Connects To Your Back-End API</p> <p>CREATE AN OOP-BASED WEB APPL...</p> <p><input checked="" type="checkbox"/> HWA-9</p>	<p>Create A Relational Database To Persist Data For The Project</p> <p>CREATE AN OOP-BASED WEB APPL...</p> <p><input checked="" type="checkbox"/> HWA-4</p>
<p>Run The Relevant Code Through A Static Analysis Tool</p> <p>CREATE AN OOP-BASED WEB APPL...</p> <p><input checked="" type="checkbox"/> HWA-8</p>		<p>Fully Integrate Code Into A Version Control System Using The Feature Branch Model</p> <p>CREATE AN OOP-BASED WEB APPL...</p> <p><input checked="" type="checkbox"/> HWA-2</p>
<p>+ Create issue</p>		<p>Create A Risk Assessment Which Outlines The Issues And Risks Faced During The Project Timeframe</p> <p>CREATE AN OOP-BASED WEB APPL...</p> <p><input checked="" type="checkbox"/> HWA-5</p>

- Understanding and implementation of Java has definitely improved since undertaking the Inventory Management System project
- Need to find a better balance of time put into planning, and time put into developing the application



Thanks!

Any questions?
You can find me at
jools.arts@gmail.com

