

Hobby Project

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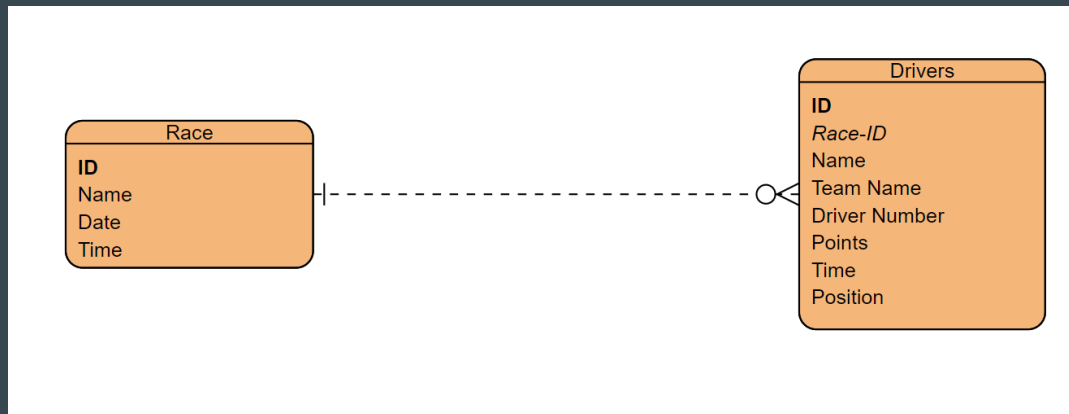
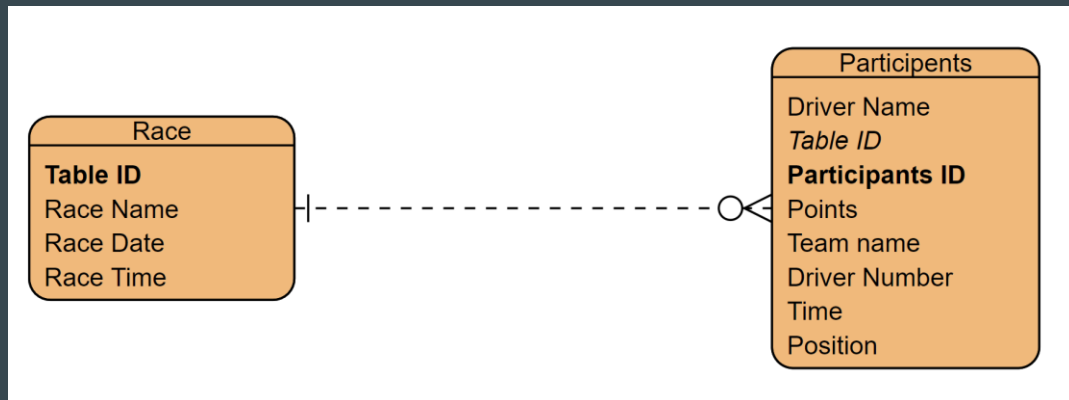
Richard Redman

Approach

- Web application
- Backend Java
- Database with a relation

Solution

- Drivers and Races
- Nested list
- Crud Functionality
- Modal and List Cards



Sprint Plan

- Need Create a Nested list
- Need Crud Functionality on Races
- Need Crud Functionality on Drivers
- Want Good looking frontend on all devices
- Documentation(ERD, UML .etc)
- Want user orderable lists
- Want able to order by category
- Need testing
- Need compliable code

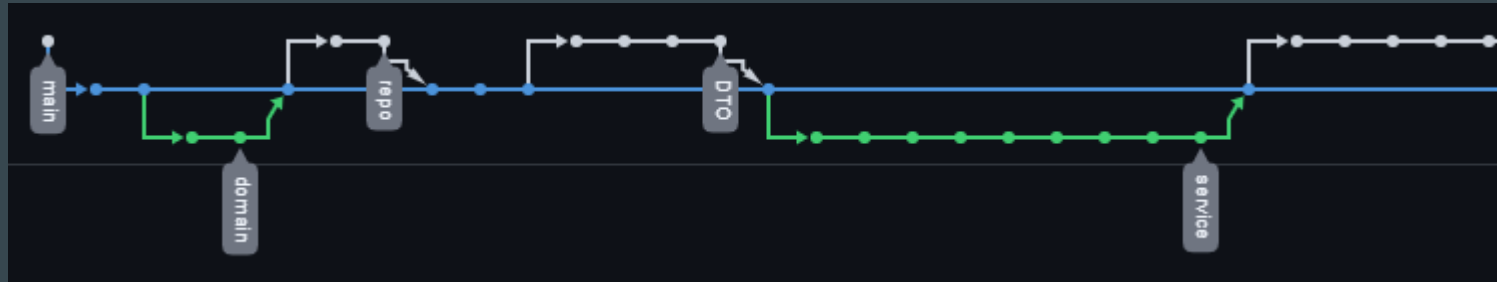
Technology learnt to the IMS

- Git repos
- Jira and Scrum boards
- Java
- SQL
- Html/CSS
- CSS
- JavaScript
- Junit/ Mockito
- Selenium



Version Control

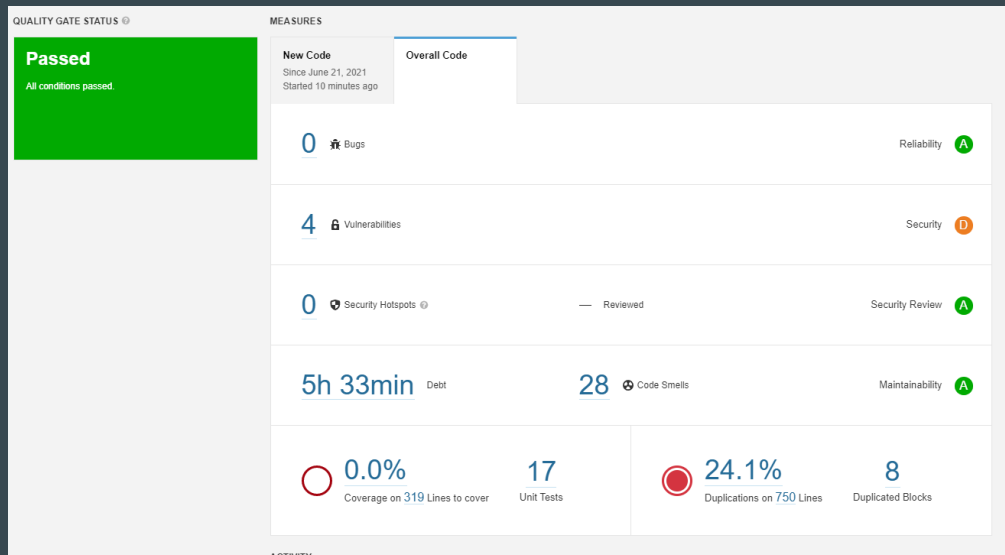
- GIT
- Branch feature Model
- Checkout new branch for each section
- Merge back to dev
- Push dev to Github repo



Testing

- Good 80% test coverage
- Very few code smells
- A rating on $\frac{3}{4}$
- No testing coverage seen
- Some duplicate code
- 4 critical vulnerability's

Element	Coverage	Covered Instructions	Missed Instructions	Total Instructions
▼ HobbyProject	71.1 %	1,719	700	2,419
▼ src/test/java	63.0 %	803	471	1,274
> com.qa.hobby.selenium	0.0 %	0	467	467
> com.qa.hobby.unit	99.1 %	431	4	435
> com.qa.hobby	100.0 %	4	0	4
> com.qa.hobby.integration	100.0 %	368	0	368
▼ src/main/java	80.0 %	916	229	1,145
> com.qa.hobby.domain	73.2 %	485	178	663
> com.qa.hobby.dto	82.2 %	111	24	135
> com.qa.hobby.mapper	86.8 %	79	12	91
> com.qa.hobby.service	94.5 %	173	10	183
> com.qa.hobby	37.5 %	3	5	8
> com.qa.hobby.controller	100.0 %	52	0	52
> com.qa.hobby.util	100.0 %	13	0	13



Vulnerability's

- Within the Controllers
- Incoming objects
- Should used DTO for both sides
- Malicious code sent to the DB

```
public DriverController(DriverService service) {
    super();
    this.service = service;
}

@PostMapping("/add")// creates the address to add a driver
public DriverDTO addDriver(@RequestBody Driver driver) {

    return this.service.addDriver(driver);
}

@GetMapping("/")// creates an address to get all drivers
public List<DriverDTO> getAllDrivers() {
    return this.service.getDrivers();
}

@PostMapping("/update/{id}")// creates an address to update a driver by id
public DriverDTO updateDriver(@RequestBody Driver driver, @PathVariable("id") Integer id ){

    return this.service.updateDriver(id, driver);
}
```

Replace this persistent entity with a simple POJO or DTO object. Why is this an issue? 10 days ago ▾ L32 🔗

🔒 Vulnerability ▾ 🚨 Critical ▾ 🔓 Open ▾ Not assigned ▾ 10min effort Comment 🛠 cwe, owasp-a5, spring ▾

Replace this persistent entity with a simple POJO or DTO object. Why is this an issue? 5 days ago ▾ L42 🔗

🔒 Vulnerability ▾ 🚨 Critical ▾ 🔓 Open ▾ Not assigned ▾ 10min effort Comment 🛠 cwe, owasp-a5, spring ▾

User stories

 Add epic /  HP-1

As a Customer , i must have the ability to add a new race to the list of races, so that if enter the details and press a submit button it will create a new race

 Add epic /  HP-3

As a Customer i Should Have the ability to change/update a race, so that if i press a button i can enter new details then press another button to confirm them

 Add epic /  HP-2

As a Customer, i Must Have the ability to see all the races that have been made, so i can see the information about the race

 Add epic /  HP-4

As a Customer, i Must have the ability to delete a Race, so that if i press a button the race will be removed

 Add epic /  HP-28

As a Customer, i Would like the website to look pleasant so that, i can navigate the page easily, with any device and have a nice viewing experience

Demo of project

Sprint Review

Completed

- Full Crud functionality
- DB Storage
- Working Front-end
- Documentation
- Testing
- HTML and JavaScript

Left Behind

- Ordered Lists
- CSS use to make the page look better
- DTO on the Receive side



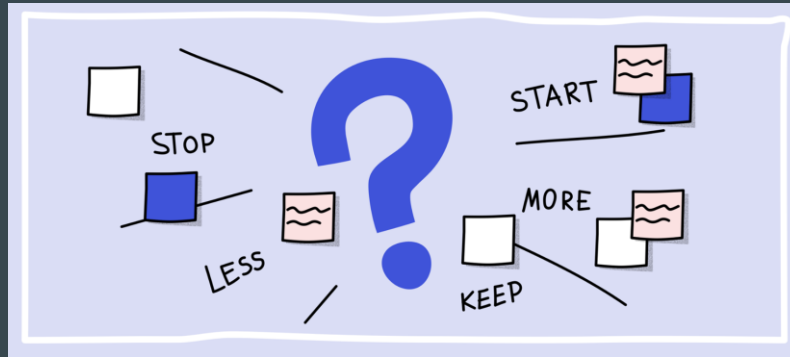
Sprint retrospective

Went well

- Keep good structure JAVA
- Keep Fully Working Project
- Keep good testing coverage
- Keep Front-end Structure
- Keep Git and Jira
- Keep initial Setup

Could be improved

- More use of interfaces
- More JavaScript Structure
- More Security
- More CSS
- Stop using Thread.Sleep()
- Start using Profiles



Lernt Outcomes

1. Focus more on JS
2. Java is Solid
3. Initial Setup
4. Look into Security of backend
5. Look into Bootstrap 5 objects
6. Plan for extra time to be left



Questions?