

# **HOBBY WEB APP (SMS)**

Moheen Akhtar

# INTRO

- Main objective

To create an OOP-based web application, with utilization of supporting tools, methodologies, and technologies, that encapsulates all fundamental and practical modules covered during training.

- Application connected with front-end website and back-end API



# MY APPROACH

- **SMART goals**
- Specific
- Measurable
- Achievable
- Realistic
- Timely
- List all plans (To do List)
- Rank- Which tasks are the most important. Repercussions?
- Adaptability and flexibility
- Time management

# RISK ASSESSMENT

- The risk assessment for this project includes a few factors that should be evaluated for any projects, whilst others were more relevant to this project. Potential risks, their impacts and mitigation techniques are outlined and categorised in terms of severity.
- Legal requirement
- Allows us to appraise risks, identify people, protect them
- Review existing control measures and make adjustments
- Better prep to unforeseen circumstances



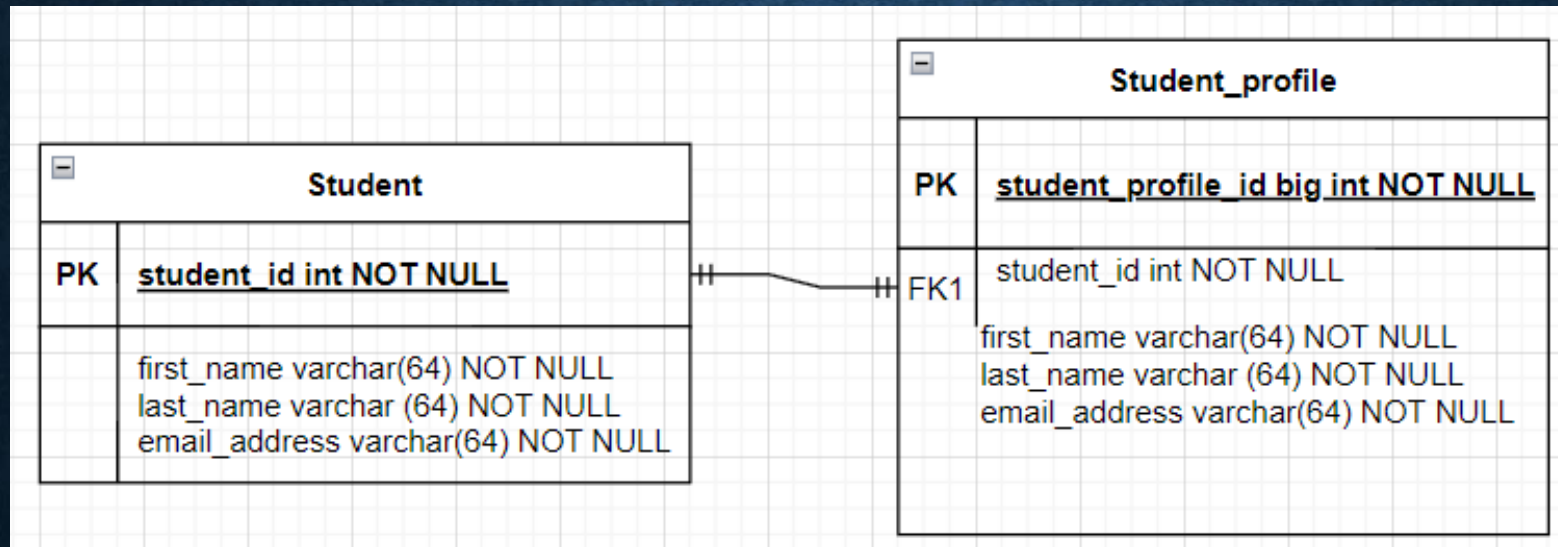
# RISK MATRIX

Why?

- Compensation
- Fines
- Legal cases
- Increased insurance
- Bad reputation
- High staff turnover- Low morale

Description of Risk	Risk Impact	Risk Likelihood	Responsibility	Evaluation	Proposed Mitigation	Response
Database is attacked and data is breached	High	Medium	Developer	If the URI is exploited or exposed. The database could be compromised, allowing the attacker to change, delete, steal data etc.	Regularly update/back-up database to restore data to deal with such an event.	All accounts to have password. Stopped using root user privilege. Drop test database.
Upload sensitive information to GitHub	Low	High	Developer	Could provide access to database or other parts of the application	Ensure not to push sensitive and/or personal data to GitHub.	Changed sensitive data and replaced with environment variables where you can.
Incorrect data input by user	Medium	Medium	Developer/User	Incorrect data on the application ruins it credibility and reliability	Test if the right data has been entered into the application.	Perform validation checks(e.g. no blank mandatory fields) to increase accuracy and unwanted data redundancy.
Natural disaster	Low	Low	Cloud service provider	Natural disaster could cause even a single region to fail causing the app to not function as required for users.	Conduct prior disaster recovery plan to run application in another region if there was to be loss of primary zonal resources	<b>Risk still requires a response.</b>
Cross-Site Request Forgery	Low	Low	Developer	Unauthorised access, GDPR breach,	Implement Challenge response mechanism to verify identity of user. E.g. 2-factor authentication.	<b>Risk still requires a response</b>

# DIAGRAMS



# SPRINT PLANNING DISCUSSION

- What?

This is the goal. Identify the backlog items that need to be done.

How?

Value and effort. Balance between value and effort.

(Specifics to follow on next slide)



# USE OF PRIORITISATION

MoSCoW method

## USER STORIES 7 ISSUES

As a student I want to be able to update my details when I have personally had a change in credentials

MUST

✓ SMS-4

As a student I want to be able to add my details on to the system

MUST

✓ SMS-1

As a student I want to be able to view my credentials when I use the system

MUST

✓ SMS-2

As a manager I want to be able to view all student records when I use the system

SHOULD

✓ SMS-3

As a student I should be able to delete my account if I'm no longer with the organisation

SHOULD

✓ SMS-5

As a user I want to be able to have a simple app layout which takes me straight to the webpage

WOULD

✓ SMS-6

As a student I want to see all students categorised in alphabetical order, order of ID, same type of email address account

WouldNot

✓ SMS-7



# MY JOURNEY

- **Obstacles**
- Uncertainty about Will not have user stories. Abandon entirely or include in next sprint
- Technologies I have gained skills in that are relevant to the project:
- Jira
- Maven- Build Tool
- Spring
- Postman
- Java
- Eclipse
- MySQL
- HTML, CSS, JavaScript

# **DEMONSTRATION OF PROJECT**



# SPRINT REVIEW

- As witnessed from the first sprint of app development, there is a lot of work to be done to determine future adaptations.
- Despite adopting an iterative approach, the aim of having a functional application available to use after every sprint has failed.
- The product backlog would need to be changed moving forward.
- Problems encountered but that which doesn't justify poor performance:
- Laptop Bitlocker. Then sign in with pin not working.
- Having to rewatch videos to understand key concepts.
- Time management proved really difficult. Forced to work overtime to produce little work.
- Main thing is I have learnt a lot is to start with the most difficult task first.

# SPRINT RETROSPECTIVE

- Focus on continuous improvement in agile methodology.
- Connect database to front-end
- Ensure front end is more aesthetically pleasing for users.
- Continue to learn new content if the opportunity is still there.
- Further create user stories to make application even more suited to users.
- Continue to build on the foundations set in each part of the project.
- Implement testing that works.



**THANK YOU FOR LISTENING**

Feel free to ask questions