



Java Based-HWA

(Auto Show) Hobby Software

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Technologies

- Version Control System: **Git**
- Source Control Management: **GitHub**
- Project Management Board: **Jira**
- DBMS: **MySQL Server 8.0.25**
- Programming Language: **Java v16**
- API Development Platform: **Spring**
- Front-end Technologies: **HTML, Bootstrap, JavaScript**
- Build Tool: **Maven**
- Testing Framework: **JUnit, Mockito**

APPROACH

- Planning the project using the project management tool and agile techniques with Jira Scrum Board.
- Creating ERD for better understanding.
- Setting up Version control and Management tools.
- Following Epics, Tasks and User Stories from Jira.
- Creating Risk Assessment matrix for reviewing any possible risk for the project.
- Testing overall coverage

Risk Assessment Table & Matrix

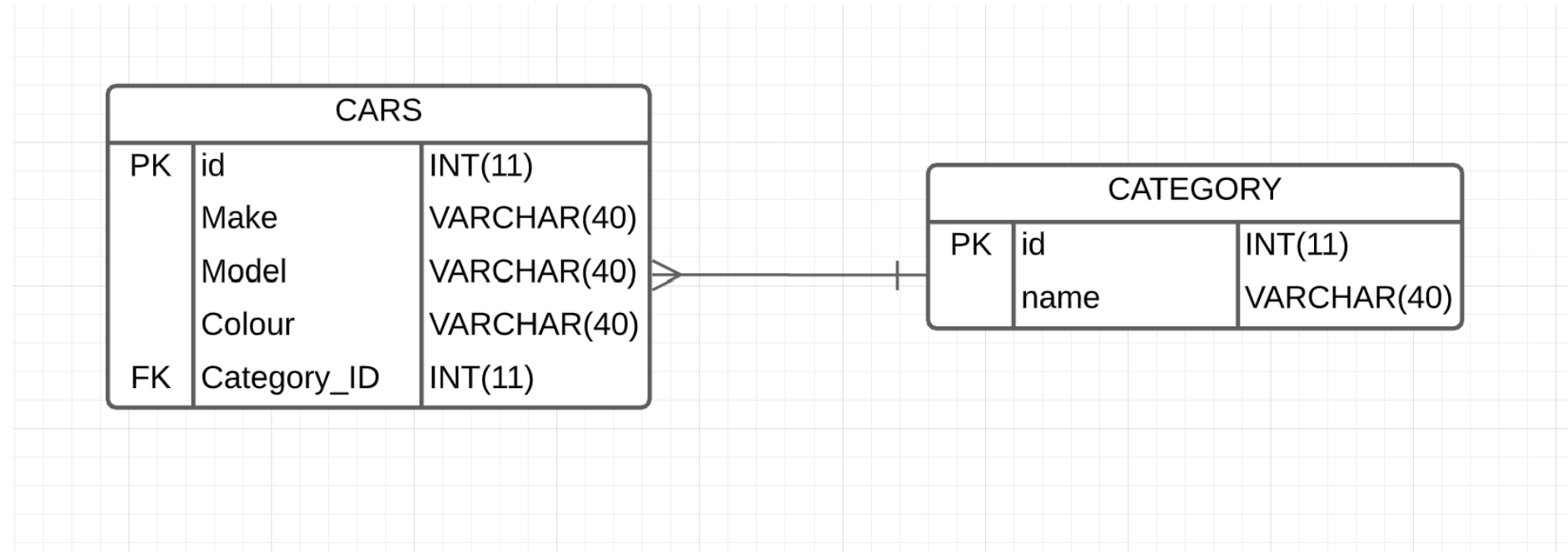
Description	Evaluation	Likelihood	Severity	Responsibility	Response
Unplanned tasks and Bugs(Unexpected problems)	Time management is important to be made for the task	High	High	Developer	Time management (do not get distributed with single error)
Developer becomes unwell	Project would be delayed	High	Medium	N/A	Ask for an extension if severity is high
SQL Workbench Versioning Issue	Versioning from pom file can disrupt the system working properly	High	High	Developer	Keeping pom file updated in every branch and every time while editing
Java versioning Issue	Versioning from pom file can disrupt the system working properly	High	High	Developer	Keeping pom file updated in every branch and every time while editing
Missed Deliverable	Marks would be lost	Medium	Medium	Developer	Attempting best possible way to maximise work effort
Failure to deliver on time	Potentially fail the project	Medium	Medium	Developer	Keep following Jira to not lose track

RISK
RATING
KEY

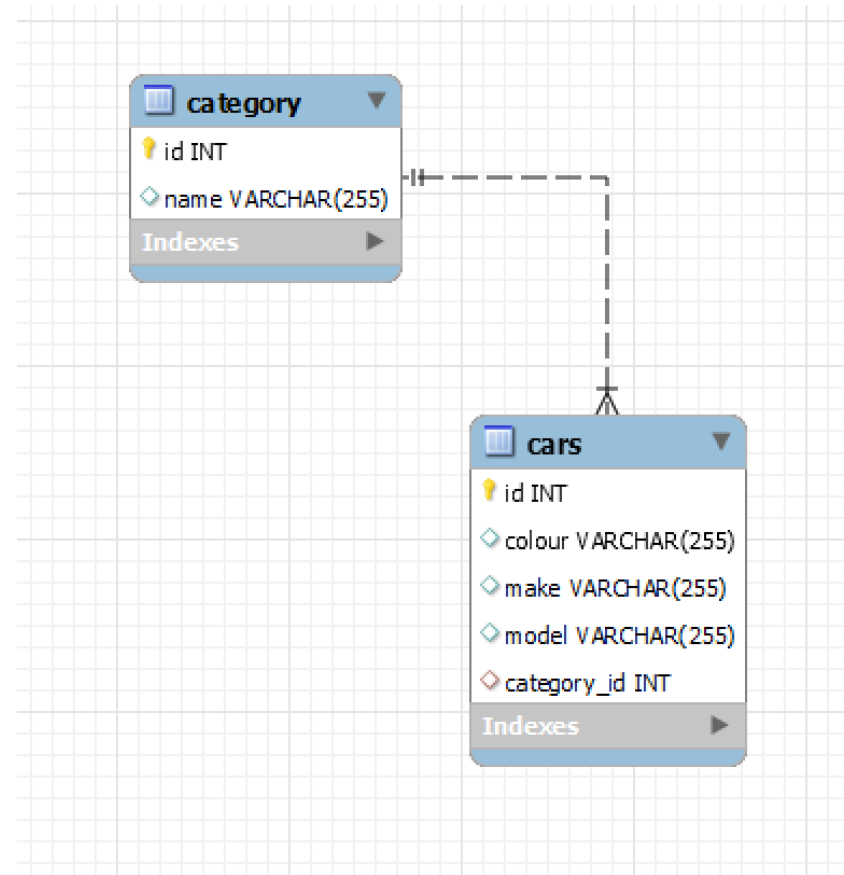
LOW	MEDIUM	HIGH	EXTREME
0 – ACCEPTABLE	1 – ALARP as low as reasonably practicable	2 – GENERALLY UNACCEPTABLE	3 – INTOLERABLE
OK TO PROCEED	TAKE MITIGATION EFFORTS	SEEK SUPPORT	PLACE EVENT ON HOLD

		SEVERITY →			
		ACCEPTABLE	TOLERABLE	UNDESIRABLE	INTOLERABLE
		LITTLE TO NO EFFECT ON EVENT	EFFECTS ARE FELT, BUT NOT CRITICAL TO OUTCOME	SERIOUS IMPACT TO THE COURSE OF ACTION AND OUTCOME	COULD RESULT IN DISASTER
LIKELIHOOD ↓	IMPROBABLE	LOW	MEDIUM	MEDIUM	HIGH
	RISK IS UNLIKELY TO OCCUR	– 1 –	– 4 –	– 6 –	– 10 –
	POSSIBLE	LOW	MEDIUM	HIGH	EXTREME
	RISK WILL LIKELY OCCUR	– 2 –	– 5 –	– 8 –	– 11 –
	PROBABLE	MEDIUM	HIGH	HIGH	EXTREME
	RISK WILL OCCUR	– 3 –	– 7 –	– 9 –	– 12 –














Database



Database



Testing-(Coverage)

Element		Coverage	Covered Instructions	Missed Instructions	Total Instructions
▼ 📁 AutoShowHWA		55.0 %	550	450	1,000
▼ 📁 src/main/java		47.0 %	372	420	792
> 📁 com.qa.cars.domains		48.1 %	149	161	310
> 📁 com.qa.cars.services		44.3 %	105	132	237
▼ 📁 com.qa.cars.restconts		28.0 %	21	54	75
> 📄 CategoryController.java		17.1 %	6	29	35
> 📄 CarsController.java		37.5 %	15	25	40
> 📁 com.qa.cars.utilities		41.3 %	31	44	75
> 📁 com.qa.cars.dtos		70.7 %	58	24	82
> 📁 com.qa.cars		37.5 %	3	5	8
> 📁 com.qa.cars.config		100.0 %	5	0	5
> 📁 src/test/java		85.6 %	178	30	208



Demonstration

Few minutes of software
demonstration

Sprint Retrospective

What went well ?

- Implementations.
- Version Control.
- Project Management.

Further Improvements ?

- Testing skills needs to be improved(up skilling).
- Security plans for front-end.



Thank You for Listening

Any Questions ?