UNDERSTANDING FULL STACK APPLICATION DEVELOPMENT Explaining with the help of Automobiles

Bicycle = Calculator App

Comparing a manual automobile with a mini app





Engineering Level Comparison

Project Details	Bicycle - Automobile	Calculator App - Digital
Product developed in	Garage	Text-Editor (Notepad)
Supporting Framework	Welded Metal Frame	Windows Batch Scripting
Required Knowledge	Bicycle Design	Windows Batch Commands
Frontend	Pedals - Handlebar	Input Area - Output Area
Backend	Gear Set	App code saved in .bat file
End-to-End Communication	Cables - Chain	In-Built Mechanism
Starting the application	Press pedal	Run code
Input	Pedaling force – Brake	Numbers - Operators
Output	Travel	Calculated Value
Database	-	Volatile Memory

Motor Bike = Full Stack Web App

Comparing an engine automobile with a web application





Engineering Level Comparison

Project Details	Motor Bike – Automobile	Full Stack Web App - Digital
Product developed in	Advanced Workshop	IDE – Integrated Development Environment (IntelliJ Community Edition)
Supporting Framework	Heavy Duty Frame	Frontend: Angular2 UI Backend: Spring Boot service
Required Knowledge	Motor Bike Design	Languages like Java, TypeScript, HTML
Frontend	Accelerator - Handlebar - Brakes - Dashboard	Browser Web Page – Form Fields – Table – File upload
Backend	Engine - Transmission – Exhaust	Hosted Server – Send Request –Receive Response
End-to-End Communication	Cables - Wires	RESTful API – Internet or Intranet – Secured Gateway
Starting the application	Engine Ignition	Start both frontend and backend servers
Input	Acceleration – Brake – Lights – Horn	Input parameters – Backend REST URL for the specific operation
Output	Long Travel	Response/Error sent from the backend
Database	-	MySQL



Q & A

THE END