

MOLDING MACHINE DASHBOARD



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INTRODUCTION



Device to capture each mold and get results by image capturing techniques



Analysis tool to provide statistical data to be used to show the effectiveness of the algorithm



Data from the analysis tool to be stored in the database



Dashboard

REQUIREMENT ANALYSIS

- FUNCTIONAL REQUIREMENTS
- NON-FUNCTIONAL REQUIREMENTS

FUNCTIONAL REQUIREMENTS

Able to list all machine and mold



Each machine mold shall be uniquely identified



Able to obtain each machine's statistics on mold shots

NON-FUNCTIONAL REQUIREMENTS

Availability of the web dashboard all times



Ability to handle 25+ machines

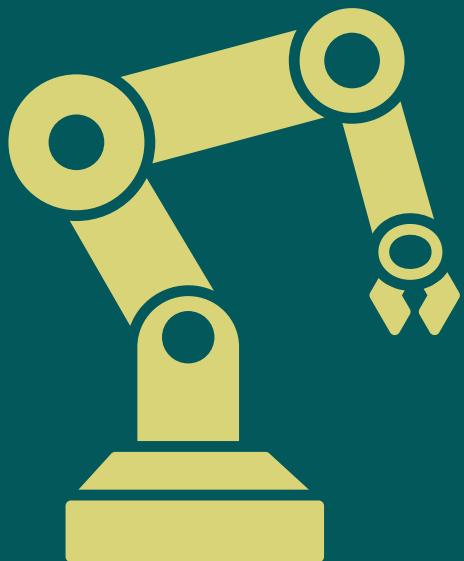
Responsive web interfaces



SOLUTION ARCHITECTURE

Device

- Already implemented
- Used to capture the images and identify stuck particles



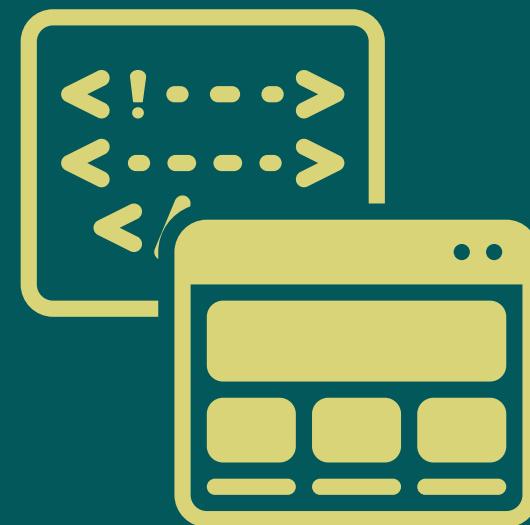
Dashboard

- Contains necessary statistics from the algorithm
- Uses React Js

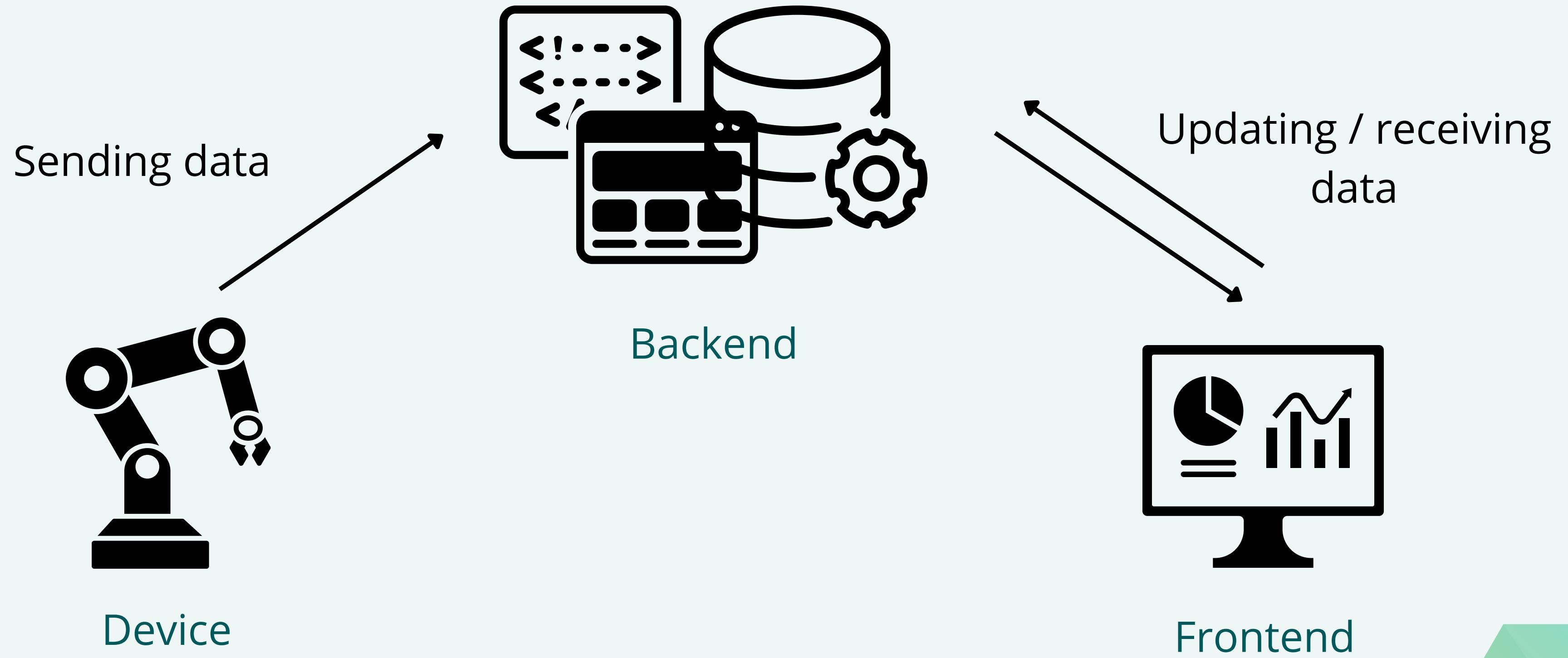


Backend

- MySQL database already implemented
- Express Js for API



FLOW OF DATA



STORAGE OF DATA

Employee	
PK	<u>emplID</u>
	firstName
	lastName
	empTitle
	admin
	userName
	password

Machine	
PK	<u>machineID</u>
FK	<u>moldID</u>
	moldShots
	failedShots
	prodRate
	prod_startDate
	prod_endDate

Mold	
PK	<u>moldID</u>
	monaNumber
	material
	moldMaker

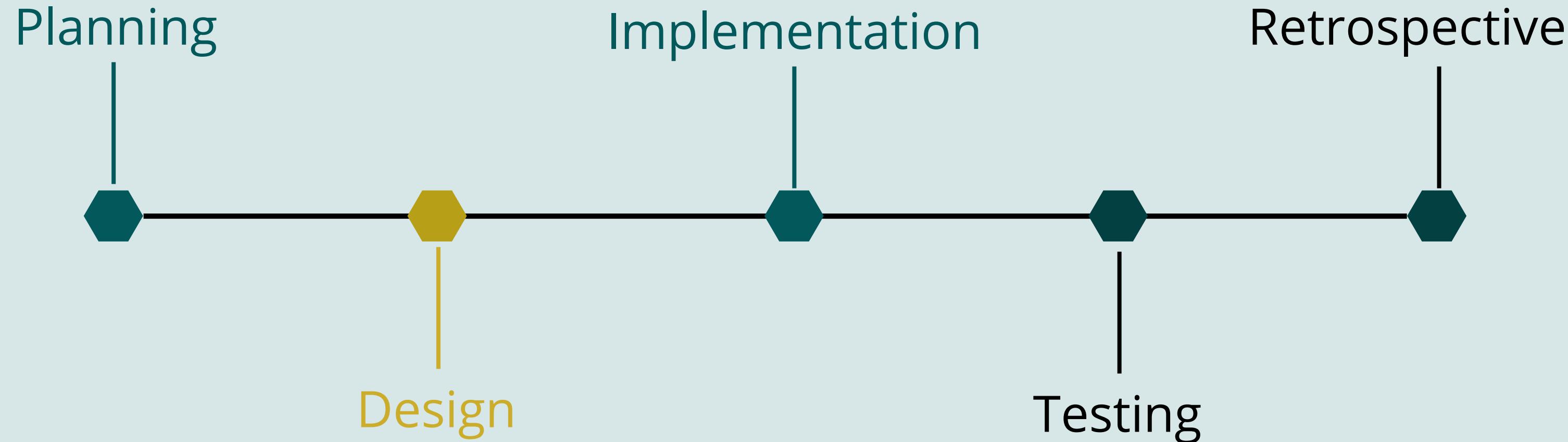
Data	
PK	<u>machineID + moldID</u>
	Datetime
	StatisticalData

PROCESS



PROCESS

PROCESS



Machine Overview

Company Name

Dashboard

Production Data

Machine 001 Machine 002 Machine 003 Machine 004

Machine 005 Machine 006 Machine 007 Machine 008

Machine 009 Machine 010 Machine 011 Machine 012

Machine 013 Machine 014 Machine 015 Machine 016

Machine 01

Company Name

Dashboard

Production Data

Product Count Product Rate

Failed Count

Start Date End Date

Machine Details

Mold Details

Mold ID Material

Mona Number Mold Maker

Mold Overview

Company Name

Dashboard

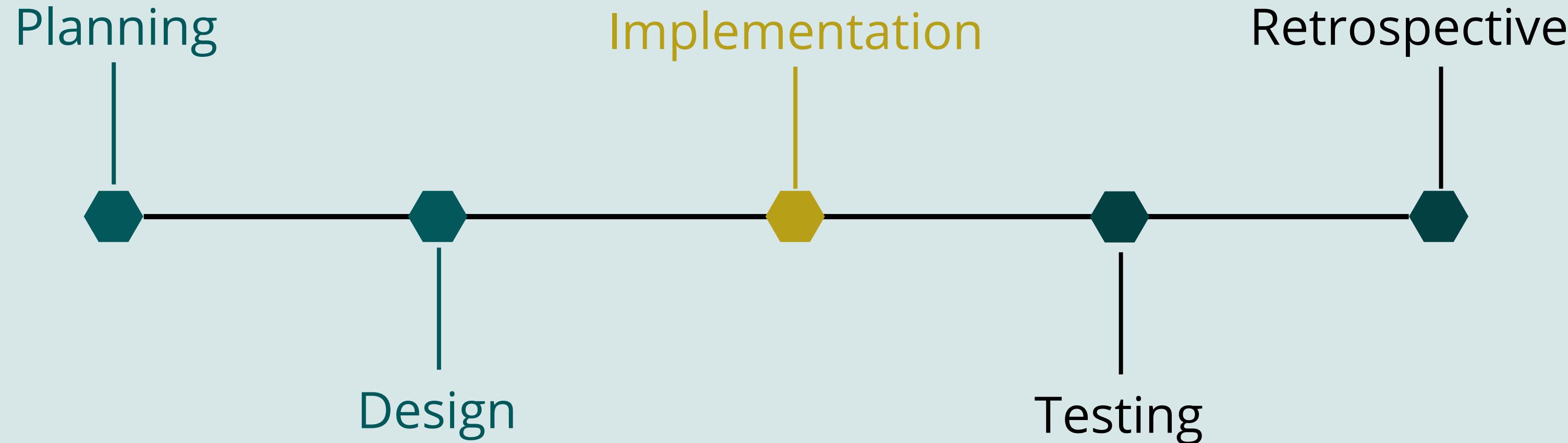
Production Data

Mold 001 Mold 002

Mold 003 Mold 004

Mold 005 Mold 006

PROCESS



DEMONSTRATION

IMPLEMENTATIONS TO BE DONE

- Connecting interfaces with the database
- Retrieving the information through the API

Q & A





THANK YOU