I & I PEER CHECK-IN:

TIME TRACKING SYSTEM FOR TRANSNET ENGINEERING R&D

Group: Susan, Thapelo S, Jed, Imraan, Wing

THE NEED

- The South African Revenue Services (SARS) incentivises companies to spend money in R&D by allowing them **tax incentives/rebates** per approved research project.

- TE's aim to be an Original Equipment Manufacturer (OEM) into Africa and the Middle East so the number of billable worked hours must be captured per resource per project to **price products/services** correctly.

- Even though old systems were implemented, the **usage is low** and the mandatory requirements stated above are still not addressed.

DESIGN THINKING PROCESS:
APPLIED TO THE TIME TRACKING SYSTEM

DESIGN THINKING

TEST
Try out the strategies and get feedback from stakeholders.

EMPATHIZE
Get to know the Engineers and their concerns.

PROTOTYPE
Transform the ideas to workable strategies.

DEFINE
Construct a point of view based on the Engineer's needs.

IDEATE
Create innovative solutions to the address challenges.

EMPATHIZE

- Conducted **interviews** with Engineers/Principal Engineers

Responses:

"Rearrange GUI. The workflow should be date>time>task" – N. Mahomed

"Lunch counter that takes the assigned time from the booked time" – K. Boshoff

"Does the time submitted be done chronologically? The start time should be populated with previous end time" – S. Shangase

"Make a special function to capture leave – start and end day" – C.Seindis

- **Shadowed** the users:

Went through the system from end to end trying to capture time

PROBLEM STATEMENT

Develop an easy-to-use and low-administrative time-tracking system for Engineers that will enable a clear audit trail of billable working hours for audit purposes and customer billing while allowing Management to view team productivity.

STAKEHOLDER IDENTIFICATION

Stakeholder	Personas	Role objective
Engineers	Direct Users (Input to System)	Daily project tracking
Principal Engineers (Managers)	Direct Users (Input to System)	Project tracking
	Team/Project Management: (Output of System)	Team Performance
		View resource allocation
Project Managers	Project Management (Output of System)	Improve project tracking
		Project end date forecasting
Finance, SARS & DST	Auditors (Output of System)	Billable working hours per project
		Audit trial of engineer time spent
		% time worked on projects

PAIN POINTS, CHALLENGES, DECISIONS

Main Challenges/Pain Points:	Key Decisions / Design Criteria
Leave Capturing per day	Integrate to HR systems
Too many clicks to capture	2 click process max
GUI not user friendly	Design Flow for GUI
Time per minute selection is overkill	Log only hours per project
Daily tracking tedious/ weekly tracking – forget what was done	Auto-populate activities – confirm if correct
Too many types of tasks/phases to select from	Reduce number of tasks per project

NEXT STEPS:

- Prototype and Testing
- Complete Report..
- Complete Slides