

STUDENT TASK & PROJECT MANAGEMENT TOOL

Presented by Yernur and
Zangar

MAIN FEATURES & USER FLOWS

SCENARIO 1

USER CREATES PROJECT,
TASK, COMMENT

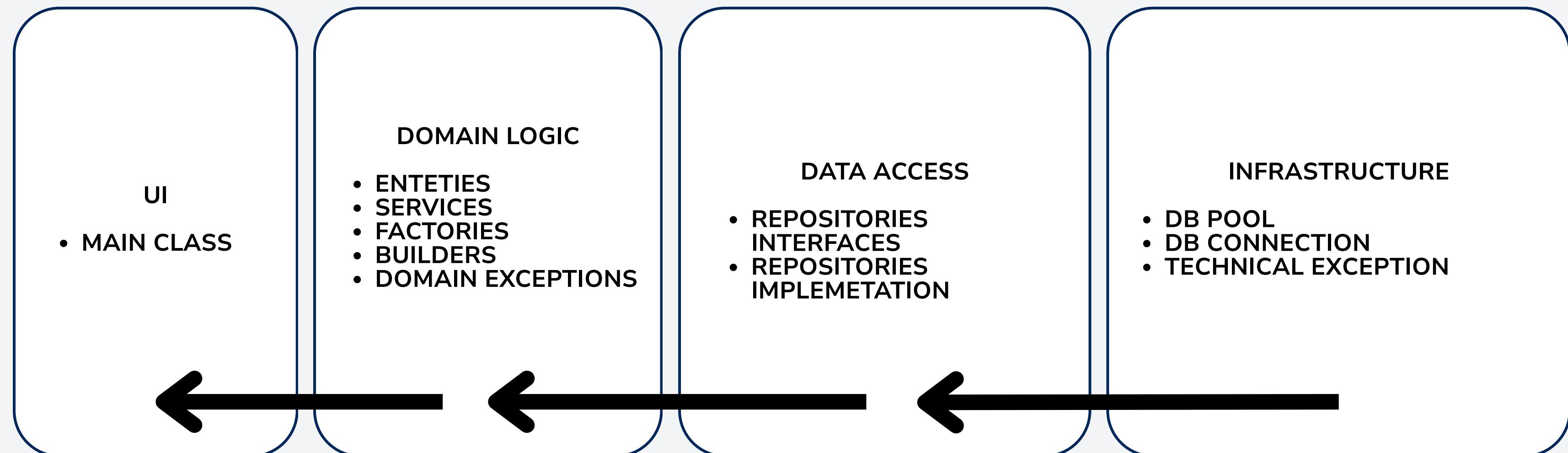
SCENARIO 3

USER CHANGES STATUS OF
TASK

SCENARIO 2

USER RETRIVES
OVERDUE PROJECTS

ARCHITECTURE OVERVIEW



SHARED

- UTILITIES

COMPONENTS

USER COMPONENT CLASSES

- USER
- IUSERREPOSITORY
- USERREPOSITORY
- USERSERVICE
- DUPLICATEEMAIL EXCEPTION
- USERNOTFOUND EXCEPTION

TASK COMPONENT CLASSES

- TASK
- BUGTASK
- FEATURETASK
- RESEARCHTASK
- TASKFACTORY
- TASKSERVICE
- ITASKREPOSITORY
- TASKREPOSITORY
- TASK-RELATED EXCEPTIONS

PROJECT COMPONENT CLASSES

- PROJECT
- PROJECTBUILDER
- PROJECTSERVICE
- IPROJECTREPOSITORY
- PROJECTREPOSITORY
- PROJECT EXCEPTIONS

INFRASTRUCTURE COMPONENT CLASSES

- SUPERBASEDB
- IDBPOOL
- DATABASE OPERATION EXCEPTION

COMMENT COMPONENT CLASSES

- COMMENT
- COMMENTSERVICE
- ICOMMENTREPOSITORY
- COMMENTREPOSITORY

SHARED COMPONENT CLASSES

- IRepository
- EntityFilter

REP: The Reuse/Release Equivalence Principle

CCP: The common Closure Principle

CRP: The common Reuse Principle

DEMO HIGHLIGHTS

The screenshot shows a PostgreSQL Table Editor interface. On the left, there is a terminal window displaying a Python script for creating a user and a project. The terminal output shows the user 'Zangar' with ID 1 and email 'zangar@example.com'. The project 'Mega Project 2' is being created with ID 4, name 'Mega Project 2', description 'Best Project', deadline '2027-10-01', and owner ID 1. A red box highlights the newly inserted row in the 'public.projects' table.

[Id: 1
Name: Zangar
Email: zangar@example.com
, Id: 2
Name: Zangar
Email: ernur@example.com
, Id: 3
Name: Timur
Email: timur@example.com
, Id: 4
Name: Azamat
Email: azamat@example.com
]
Choose user by id:
1
Current user:Id: 1
Name: Zangar
Email: zangar@example.com

Creating new project
Project name:
Mega Project 2
Project deadline in MM/dd/yyyy:
10/01/2027
Description:
Best Project
Creating
Added successfully:Project{id=4, name='Mega Project 2', description='Best Project', deadline='2027-10-01', createdAt='2026-02-08', ownerId=1}

Table Editor

public.users public.tasks public.projects public.comments

Insert

Add RLS policy Index Advisor Enable Realtime Role postgres

	id int8	created_at date	name varchar	description varchar	deadline date	owner_id
1	1	2026-01-19	Music App	App for listening and loading music	2026-12-12	1
2	2	2026-01-28	Good	Cool	2029-01-02	1
3	3	2026-01-28	Bad	Worse	2029-01-06	1
4	4	2026-02-08	Mega Project 2	Best Project	2027-10-01	1

Feedback Search... K ? X 🔍

**THANK
YOU**