KoProject

Structure Project Management

1. Domain Model Objects Summary

The main objects that should be stored in project database are: **Employee**, **Project**, **Task** and **Project Message**.

Employee is the main class object as a user role. Every registered user have first and last name, username, password, email and role as an employee by default. It is an abstract class that is inherited by Admin which extends its functionality.

Project is the entity users should work on it. The attributes are name, members (i.e. **Employee**), client, time estimate, due date and **tasks.**

Task is a subpart of the **Project** with its name, member (i.e. **Employee**), description, time estimate and due date.

Project Message's attributes are **Project**, comment and member (i.e. **Employee**).

To be unique all entities have their own IDs.

One **Employee** can be involved to zero or many **Projects**, can have zero or many **Tasks** and **Project Messages**. One **Project** should have one or many **Tasks** and zero or many **Project Messages. Project** has a composition relationship with **Project Messages** and **Tasks** (they cannot exist if **Project** class is destroyed) and aggregation relationship with Employee (**Project** can be assigned to another user).

2. Entity Relationship Diagram (ERD)

KoProject
by Martin Kokonyan

ProjectMessage		
PK	projectMessageId	
FK	project	
	comment	
FK	member	

Employee		
PK	userId	
	firstName	
	lastName	
	username	
	password	
	email	
	role	

Project		
PK	projectId	
	name	
FK	members	
	client	
	timeEstimate	
	dueDate	
FK	tasks	

Task		
PK	taskId	
	name	
FK	member	
	description	
	timeEstimate	
	dueDate	