**Project Attributes**

1. **Project ID**
2. **Project Name**: The title of the project.
3. **Budget**: Financial resources allocated for the project.
4. **Project Manager**: The person responsible for overseeing the project.
5. **Team Members**: Individuals assigned to work on the project.
6. **Description**: A brief overview of the project’s objectives and scope.
7. **Start Date**: The date when the project is expected to begin.
8. **End Date**: The projected completion date for the project.
9. **Milestones**: Key phases or checkpoints within the project timeline.
10. **Priority**: Level of importance (e.g., high, medium, low).
11. **Status**: Current state of the project (e.g., not started, in progress, completed).
12. **Dependencies**: Other projects or tasks that this project relies on or is impacted by.
13. **Risks**: Potential challenges or issues that could affect the project.
14. **Deliverables**: Specific outputs or results expected from the project.
15. **Stakeholders**: Individuals or groups with an interest in the project’s outcome.
16. **Communication Plan**: Outline of how project updates will be communicated to stakeholders.
17. **Location**: Physical or virtual location of the project, if applicable.

### Budget Attributes

1. **Project ID**
2. **Budget id**
3. **Total Budget**: The overall financial allocation for the project, representing the maximum amount that can be spent.
4. **Budget Breakdown**: A detailed breakdown of the total budget into specific categories (e.g., labour, materials, equipment, marketing, etc.).
5. **Allocated Budget**: The amount of the total budget assigned to different tasks, phases, or departments within the project.
6. **Spent Amount**: The total amount that has already been spent on the project, allowing for tracking against the budget.
7. **Remaining Budget**: The remaining amount of the budget that is still available for spending, calculated as Total Budget minus Spent Amount.
8. **Estimated Costs**: Projected costs for tasks or resources that may arise during the project lifecycle.
9. **Cost Variance**: The difference between the budgeted amount and the actual amount spent, which helps in assessing financial performance.
10. **Budget Owner**: The individual or role responsible for managing the budget, ensuring that spending stays within limits.
11. **Budget Approval Status**: Indicates whether the budget has been approved, is pending approval, or has been revised.
12. **Expense Reports**: Links or references to detailed reports or records of expenses incurred throughout the project.

**Milestone Attributes**

1. **Milestone id**
2. **Project id**
3. **Milestone Name**: A clear and concise title for the milestone.
4. **Description**: A brief explanation of what the milestone represents and its significance.
5. **Due Date**: The date by which the milestone should be achieved.
6. **Status**: Current state of the milestone (e.g., not started, in progress, completed).
7. **Associated Tasks**: Tasks that need to be completed to reach the milestone.
8. **Dependencies**: Other milestones or tasks that must be completed before this milestone can be achieved.
9. **Owner**: The person or team responsible for ensuring the milestone is met.
10. **Completion Criteria**: Specific conditions that must be met for the milestone to be considered complete.
11. **Notifications**: Alerts to notify team members as the milestone due date approaches.

**Task Attributes**

1. **Milestone id**
2. Task id
3. **Task Name**: A brief title for the task.
4. **Description**: Detailed information about what the task involves.
5. **Assigned To**: The user or team member responsible for completing the task.
6. **Due Date**: The deadline for task completion.
7. **Priority**: Importance level (e.g., high, medium, low).
8. **Status**: Current state of the task (e.g., to-do, in progress, completed, blocked).
9. **Time Estimate**: Estimated time required to complete the task.
10. **Time Logged**: Actual time spent on the task by the assignee.
11. **Tags/Labels**: Keywords to categorize or identify tasks (e.g., bug, feature, research).
12. **Subtasks**: Smaller tasks that fall under the main task for better tracking.
13. **Dependencies**: Other tasks that need to be completed before this task can start.
14. **Attachments**: Files or documents relevant to the task (e.g., specifications, designs).
15. **Comments**: Section for team members to discuss or provide updates on the task.

**Subtask Attributes**

1. **Subtask id**
2. **Task id**
3. **Subtask Name**: A concise title that describes the subtask.
4. **Description**: Detailed information about what the subtask involves.
5. **Assigned To**: The team member responsible for completing the subtask.
6. **Due Date**: The deadline by which the subtask should be completed.
7. **Status**: Current state of the subtask (e.g., not started, in progress, completed).
8. **Priority**: Importance level (e.g., high, medium, low).
9. **Estimated Time**: An estimate of how long the subtask will take to complete.
10. **Time Logged**: Actual time spent on the subtask.
11. **Dependencies**: Other subtasks or tasks that must be completed before this subtask can start.
12. **Attachments**: Any relevant files or documents related to the subtask.

**Employee Attributes**

1. **Employee ID**: A unique identifier for each employee.
2. **Name**: The full name of the employee.
3. **Email**: Contact email for communication.
4. **Role/Title**: The position of the employee within the organization (e.g., Project Manager, Developer, Designer).
5. **Department**: The department in which the employee works (e.g., Development, Marketing, HR).
6. **Phone Number**: Contact number for direct communication.
7. **Status**: Employment status (e.g., active, on leave, terminated).
8. **Skills/Expertise**: Relevant skills or areas of expertise that the employee possesses.
9. **Availability**: The employee’s working hours and availability for tasks.
10. **Assigned Projects**: A list of projects the employee is currently assigned to.
11. **Performance Metrics**: Relevant performance data, such as task completion rate, feedback, or hours logged.
12. **Profile Picture**: Optional image for user profiles to enhance personal interaction.

### Role Attribute Details

1. **Role id**
2. **Role Name**: The title or designation of the employee's role (e.g., Project Manager, Developer, Designer).
3. **Role Description**: A brief overview of the responsibilities and expectations associated with the role.
4. **Responsibilities**: A list of specific tasks and duties the employee is expected to perform in their role.
5. **Rank**: Hierarchical level within the organization, which can help in understanding reporting structure (e.g., Junior, Mid-level, Senior).
6. **Role Type**: Indicates whether the role is full-time, part-time, contractor, or intern.