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| **Course Code** | COIS20026 |

**Entity Relation Diagram:**



**Business Rules and Assumptions:**  
  
1. Considering only applicants who are applying for research, however the database should contain the details of non applicants as well as the people  who have been enquired but never applied due to time constraints.  
  
2. Considering that an applicant who is a researcher is giving minimum of one proposal for research.  
  
3. All the proposals submitted by the researchers will go through a expert panel.  
  
4. The outcome of the assessment comes with a recommendation such as superior, exceptional, recommended or rejected.  
  
5. Each proposal which is approved by expert panel will have at least one task.  
  
6. The expert panel may consist of experts from the same university, other domestic universities and also overseas organisations.  
  
7. One project is done at one time.  
  
8. Few tasks may have pre-requisites. All the pre requisites are to be recorded.  
  
9. Each project will have a certain budget allocated, it will have a definite starts date and should have an end date.  
  
10. The proposal will become a project only when it is approved by the expert panel and certain fund has to be allocated.  
  
11. The Approved grant amount should be strictly less the budget.  
  
12. The project which is completed within the given budget will be recorded by the university.  
  
13. Every researcher is supposed to submit the comprehensive report to the audit by the expert panel.  
  
14. The review status of the project will be either one among "pending", "confirmed", "in progress", "completed" or "cancelled" depending upon their valid status.

**Entity and Attribute Definitions:**

**APPLICANT:** Applicant is a staff who has applied for research and has given proposal.

ApplicantID: It identifies the Applicant uniquely.

Applicant\_Name: Name of the Applicant.

Research\_Expertises: The area in which the applicant is expert in and his proposal belongs to.

Department: Applicants Department in the University.

Corres.Address: Correspondence Address of the Applicant.

Contact Number: Contact Phone Number of the Applicant

Email: Applicant’s email address.

**PROPOSAL**: The Proposals that were submitted by the Applicants.

ProposalID: Each Proposal has a unique ProposalID.

Title: The Title of the Proposal.

Requested\_Grant\_Amount: The Amount requested by the applicant for the research.

**ASSESMENT**: The Assesing procees done for the proposal.

AssesmentID: Unique id of Assesment.

Grant\_Amount: Amount granted by the expert panel.

General\_Comments: Comments given by the expert panel.

Date: Assessed date.

**PROJECT:** The proposals which were approved by the expert panel is now a Project.

Project\_id: The unique id assigned to the project.

Budget: The approved budget for the project.

Start\_Date: Date when Project is started.

Finish\_Date: Project Completed Date.

Status: Project completion status or current status.

**EXPERT PANEL:** The Panel of Experties can be either from same organization or any other domestic organization or the overseas organization.

Expert\_ID: The unique id of the expertee who is a part of expert panel.

Name: The Name of the Expertee from the Expert Panel.

Title: The title of the Expertee goes here.

Expertise\_area: The area in which the expertee is expert in.

Phone\_Number: The Phone number of the expertee.

E\_Mail: The email address of the expertee.

**TASK:** Sequence of steps conducted by the researcher.

Task\_ID: The unique id of the certain task of certain project.

Estimated\_Expences: The estimate of the expences.

Start\_Date: The Start date of the particular task.

Finish\_Date: The certain finish date of that particular task.

Status: The current status of the task.

**AUDIT:** Once the project is finished, it will be audited by the designated person.

Report\_ID: The Unique id of the Audit Report of certain task or the proposal.

Audit\_Date: The date when the Audit was completed.

Actual\_Budget: The Actual granted amount by the panel for the project.

General\_Comments: The Overal general comments given by the experts regarding the budget.

Status: The Status of the Project canbe any of these four: “Pending”, “Confirmed”, “in progress”, “completed” or “canceled”.