Project Description

What is the domain of the application? Describe it.

The domain of our application is space exploration and managing space missions. It focuses on planning and recording space missions, the agencies conducting these missions and launches, as well as the managing of astronauts, spacecrafts, celestial bodies, and other equipment.

What aspects of the domain are modeled by the database? (what your project is trying to address and how it fits within the domain)?

The database models the operations of space missions including tracking astronauts, assignment of missions by various agencies, spacecraft and rocket use, and the equipment carried and operated during missions. It models where missions are launched, which celestial bodies are targeted, and the training programs astronauts take part in. It could be used by agencies like NASA to plan various missions by assigning astronauts, selecting equipment, and recording the details of the mission while it is ongoing and after it terminates. It can also be used by astronomy-fanatics to research historical/current missions!

What functionality will the database provide (what kinds of things will people using the database be able to do)?

The database will allow users to track and manage space missions, astronaut assignments, spacecraft usage, equipment logistics, and training history. Users will be able to assign astronauts to missions, target celestial bodies, log mission details (such as events, problems, updates, etc.), and determine which spacecraft and equipment were used. The system will also support training program management, allowing users to record which astronauts have completed specific training modules.

Description of the application platform.

We plan to use Oracle for our database. As for our expected application technology stack, we will be using Java.