XeroDB Parts Management System

# Concepts

This section explains the concepts that are key to the parts management system.

Users

Users are the people that can interact with the system. Users each have roles and there are three key roles. A user can have the ‘student’ role, the ‘mentor’ role, or the ‘admin’ role. The ‘student’ and ‘mentor’ role are key to the part flows that are described below. The ‘admin’ role gives a user to perform functions that are key to the administration of the system, like editing user information.

Parts

Parts are things that make up the robot. Parts can be manufactured parts that are manufactured by our robotics team. Parts can be COTS (commercial off the shelf) parts that are purchased from outside vendors. Parts can also be assemblies that are made up of other types of parts and assembled to create a new part.

Robots

Parts are presented and managed within the scope of a robot. Since parts that are assemblies are made of other parts, a robot is really a tree of parts. In fact, a robot is represented as a pair of robot trees, one for the practice robot and one for the competition robot.

Flows

Flo

