**Persistence**

**Database Using Persistence Framework**

For our RUM system we made our database using only the persistence framework. We currently have implemented our entire persistence framework database and it can be found in these files:

* Course.java
* Major.java
* Requirement.java
* CourseGroup.java
* SystemManager.java

All of these files are entities and with the JPA all necessary tables are created automatically.

**File Formats**

All information on file formats can be located on page 7 of the requirements document (or check below). It discusses the three different types of files that will store information.

The following types of files will be uploaded by users for data entry:

Course listing file

Major requirements file

Student info

Course listing file-This file is in CSV format and will be the file used by the super admin to upload course offering information. This file will need to maintain the following information about each course:

Course name

Meeting time (for scheduling)

Semesters offered

Prerequisites (as a non-comma delimited string)

This file be comma and line delimited.

Major requirements file- The major requirements file is in CSV format and will be used by department administrators to upload major requirements. It will be able to be edited by them after upload, and can be re-downloaded and saved. The following data will need to be maintained by the file.

Major name

Minimum GPA

Required Courses

Minimum Grade

Student info file- This file is in CSV format and will be used by the student to upload personal data and course data into the system. The information that will need to be contained in this file is:

Name

Major

Class name

Grade

The student can edit this file after it is uploaded, and the student will be able to re-download this file. It should be in comma separated format.