**Software Design Specification**

**for**

**<Project>**

**Version: 1.0**

**Date created:**

**Prepared by:**

**<Team Leader>**

**<Team Member 2>**

**<Team Member 3>**

**<Team Member 4>**

**System Dataflow Diagram**

Submit a dataflow diagram for your entire system. Ovals to represent processes, double lines to represent data stores and large arrows showing the flow of data are sufficient for this diagram.

This diagram should show the major components in your system and how they link to each other. If any component has major sub-components, show these sub-components within the enclosing component. This diagram would give a good idea of how the actual data flows through your system.

**UML Class Diagram**

Submit a UML class diagram for your system in the format shown in lecture. Your diagram should display all major classes, key public methods (you don’t have to list constructors, accessors or mutators), inheritance/interface relationships, and associational relationships (with multiplicity adornments). Your design will be evaluated on completeness as well as level of thought, attention to principles discussed in class, and proper UML syntax. Follow Object Oriented design principles, such as:

* use encapsulation
* keep related data and behavior in the same place
* minimize each class's public interface
* emphasize cohesion and limit coupling
* avoid "god classes" that do everything
* avoid insignificant or irrelevant classes

Distribute your project's functionality and allow for features to be developed in parallel as much as possible.

Part of your grade will come from the plausibility, thoughtfulness, and level of detail of your work. If you are listing classes in your class diagram, take care not to forget important classes that would reasonably needed to solve the task you are working on. Do not forget to include classes for all aspects of your system, such as user interface, data modeling, database interaction, any "helper" classes or utility code, etc.

**Database Schema Diagram**

Submit a database schema diagram that shows your database structure. Show all tables, columns, primary keys, and foreign keys (if any)