# IT 315 Final Project Part II Solution Submission

**Name: Jason Lima**

**Date:**

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| 1**.** | Using this class responsibility collaboration (CRC) card template, document each class you identified from your student information system (SIS) functional model:  CRC Card 1:   |  |  |  |  | | --- | --- | --- | --- | | Front: | | | | | Class Name: Staff | ID: 1 | | Type: Concrete, Domain | | Description: An individual who works at the college who has the authority to maintain student and class records. | | | Associated Use Cases: 1, 2, 3, 4 | | Responsibilities:  Maintain Student Records  Maintain Course Records  Maintain Class Records  Register Student for Classes | | Collaborators:  Class  Course | | | Back: | | | | | Attributes:  Employee ID  Name  Email  Phone Number | | | | | Relationships:  Generalization (a-kind-of):  Aggregation (has-parts):  Other Associations:  Class  Course | | | |   CRC Card 2:   |  |  |  |  | | --- | --- | --- | --- | | Front: | | | | | Class Name: Student | ID: 2 | | Type: Concrete, Domain | | Description: An individual who is enrolled in courses at the college | | | Associated Use Cases: 4 | | Responsibilities:  Register Student for Classes | | Collaborators:  Class | | | Back: | | | | | Attributes:  Student ID  Name  Email  Phone Number | | | | | Relationships:  Generalization (a-kind-of):  Aggregation (has-parts):  Other Associations:  Class | | | |   CRC Card 3:   |  |  |  |  | | --- | --- | --- | --- | | Front: | | | | | **Class Name:** Course | ID: 3 | | Type: Detail, Essential | | Description: The available courses available at the college change according to the needs of the education plan developers | | | Associated Use Cases: 3 | | **Responsibilities:**  Add Course  Modify Course  Delete Course | | **Collaborators:**  Class | | | Back: | | | | | **Attributes:**  Course identification (e.g., IT 315)  Course name (e.g., Object-Oriented Analysis and Design)  Credit hours  Description | | | | | **Relationships:**  **Generalization (a-kind-of):**  **Aggregation (has-parts):**  Student  Professor  **Other Associations:** | | | | |
| CRC Card 4:   |  |  |  |  | | --- | --- | --- | --- | | Front: | | | | | **Class Name:** Class | **ID:** 4 | | **Type:** Detail, Essential | | Description: Staff members need to be able to CRUD the class information to provide a list of classes offers by the university in certain timeframes, locations, etc. | | | **Associated Use Cases:** 2 | | **Responsibilities:**  Add Class  Modify Class  Delete Class | | Collaborators:  Course | | | Back: | | | | | **Attributes:**  Class identification (int)  Class begin date (date)  Class end date (date)  Class URL (online) (string)  Class browser (online) (string)  Class building (f-2-f) (string)  Class room (f-2-f) (string) | | | | | Relationships:  **Generalization (a-kind-of):**  **Aggregation (has-parts):**  Course  **Other Associations:**  Building | | | |   SIS Class Diagram |
| 2. | Verify and validate your CRC cards and class diagram against your SIS functional model:  Based on my functional model there are 4 classes that interact with the system from the given system requirements. Each class could have their own objects that represent the people and things that interact with the system. A class of students contains student objects or people who can attend courses by enrolling in certain classes. Staff is like the student class since it is a framework for the staff at the college and multiple staff can be made. |
| 3. | Explain your approach to the problem, the decisions you made to arrive at your solution, and how you completed it:  My approach was to look at the functionality diagram and look to the outside entities that were interacting with the system and looking to see if there could be objects created from that entity. This would be the template for the class. After capturing the student and staff classes, I look to the inside of the system and dissent each use case to determine if there were any objects that had inputs to process in the case. |
| 4. | Reflect on this experience and the lessons you learned from it:  Learning about the planning phase and architecture phase will help me become a better programmer overall. Usually people begin programming with no plan and this is especially difficult if you have no knowledge of objects. I will be using these methods of developing diagrams to create programs that can be used my other people that works professionally. The functional and structural models can greatly help in developing a conceptual understanding of the program you are creating by having the documentation on hand where you and others can understand the program. |