**Concept Map:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Concept Level** | **Concept** | **Where to Find** | **How it was demonstrated** |
| Intermediate | Recursion | Assignment # 01 | Parenthesis Problem that requires recursion to solve. |
| Intermediate | Abstract Classes and Interface | Assignment # 02 | Real world payment system through multiple payment options such as PayPal and Debit. |
| Advanced | Abstracted Link Lists | Assignment # 03 | Real world task management system implements in linked list |
| Advanced | Higher Order Functions | Assignment # 04 | Generating a report regarding courses and students grades through higher order functions. |
| Intermediate | Hierarchical Data Representation | Assignment # 05 | Display all the employees of the company in a Hierarchical Data Representation from csv file |
| Advanced | MVC | Assignment # 06 | Implement a task manager through MVC design pattern. |
| Intermediate | SOLID Principles | Assignment # 07 | Theory of each principle explain with a code example. |
| Intermediate | Design Pattern | Assignment # 08 | Use factory design pattern for a game that have multiple types of zombies having different functionality. |