

Concept Map:

Concept Level	Concept	Where to Find	How it was demonstrated
Intermediate	Recursion in Practice	Section 1	Parenthesis Problem that requires recursion to solve.
Intermediate	Abstract Classes and Interfaces	Section 2	Real world payment system through multiple payment options such as PayPal and Debit.
Advanced	Abstracted Linked Lists	Section 3	Real world task management system implements in linked list
Advanced	Higher Order Functions – Map, Filter, and Fold	Section 4	Generating a report regarding courses and students grades through higher order functions.
Intermediate	Hierarchical Data Representation	Section 5	Display all the employees of the company in a Hierarchical Data Representation from csv file
Advanced	MVC Design	Section 6	Implement a task manager through MVC design pattern.
Intermediate	SOLID Principles	Section 7	Theory of each principle explain with a code example.
Intermediate	Factory Design Pattern	Section 8	Use factory design pattern for a game that have multiple types of zombies having different functionality.