

**Department of Computing**

**Algorithms and Data Structures**

**(55-508226-AF-20212)**

**Name: A. N. Other**

**Student ID: 232208**

**Table of Contents**

[1. Project 1 4](#_Toc83301441)

[1.1 Algorithms in ADL 4](#_Toc83301442)

[1.2 Software and its presentation, including testing (and video link) 4](#_Toc83301443)

[1.4 Descriptive Report, including artefacts 4](#_Toc83301444)

[1.4.1 Transitioning algorithms to implementation 4](#_Toc83301445)

[1.4.3 Problem-solving strategy 4](#_Toc83301446)

[1.5 Incorporation of formative feedback 4](#_Toc83301447)

[2. Project 2 4](#_Toc83301448)

[2.1 Descriptive report, including artefacts 4](#_Toc83301449)

[2.1.1 Time-Space Trade-off Choices made 4](#_Toc83301450)

[2.1.2 Computational Complexity 4](#_Toc83301451)

[2.2 Incorporation of formative feedback 4](#_Toc83301452)

[3. Project 3 4](#_Toc83301453)

[3.1 Algorithms in ADL 4](#_Toc83301454)

[3.2 Data Structures 4](#_Toc83301455)

[3.3 Software and its Presentation, including testing (and video link) 4](#_Toc83301456)

[3.4 Descriptive Report, including artefacts 4](#_Toc83301457)

[3.4.1 Transitioning algorithms to implementation 4](#_Toc83301458)

[3.4.2 Problem-solving strategy 4](#_Toc83301459)

[3.5 Incorporation of formative feedback 4](#_Toc83301460)

[4. Project 4 4](#_Toc83301461)

[4.1 Proposed Algorithms 4](#_Toc83301462)

[4.1.1 Elevator Algorithm 4](#_Toc83301463)

[4.1.2 The Elevator Algorithm in ADL 4](#_Toc83301464)

[4.2 Software and its Presentation, including testing (and video link) 4](#_Toc83301465)

[4.3 Descriptive Report, including artefacts 4](#_Toc83301466)

[4.3.1 Experiment Strategy 4](#_Toc83301467)

[4.3.2 Experiment Results 4](#_Toc83301468)

[4.3.3 Findings and Discussion 4](#_Toc83301469)

[4.4 Incorporation of formative feedback 5](#_Toc83301470)

[5. Project 5 5](#_Toc83301471)

[5.1 Algorithms 5](#_Toc83301472)

[5.1.1 Introduction to Genetic Algorithm 5](#_Toc83301473)

[5.1.2 Proposed Genetic Algorithm in ADL 5](#_Toc83301474)

[5.2 Software and its Presentation, including testing (and video link) 5](#_Toc83301475)

[5.3 Descriptive Report, including artefacts 5](#_Toc83301476)

[5.3.1 Experiment Strategy 5](#_Toc83301477)

[5.3.2 Experiment Results 5](#_Toc83301478)

[5.3.3 Findings and Discussion 5](#_Toc83301479)

[5.4 Incorporation of formative feedback 5](#_Toc83301480)

# 1. Project 1

## 1.1 Algorithms in ADL

## 1.2 Software and its presentation, including testing (and video link)

## 1.4 Descriptive Report, including artefacts

### 1.4.1 Transitioning algorithms to implementation

### 1.4.3 Problem-solving strategy

## 1.5 Incorporation of formative feedback

# 2. Project 2

## 2.1 Descriptive report, including artefacts

### 2.1.1 Time-Space Trade-off Choices made

### 2.1.2 Computational Complexity

## 2.2 Incorporation of formative feedback

# 3. Project 3

## 3.1 Algorithms in ADL

## 3.2 Data Structures

## 3.3 Software and its Presentation, including testing (and video link)

## 3.4 Descriptive Report, including artefacts

### 3.4.1 Transitioning algorithms to implementation

### 3.4.2 Problem-solving strategy

## 3.5 Incorporation of formative feedback

# 4. Project 4

## 4.1 Proposed Algorithms

### 4.1.1 Elevator Algorithm

### 4.1.2 The Elevator Algorithm in ADL

## 4.2 Software and its Presentation, including testing (and video link)

## 4.3 Descriptive Report, including artefacts

### 4.3.1 Experiment Strategy

### 4.3.2 Experiment Results

### 4.3.3 Findings and Discussion

## 4.4 Incorporation of formative feedback

# 5. Project 5

## 5.1 Algorithms

## 5.1.1 Introduction to Genetic Algorithm

## 5.1.2 Proposed Genetic Algorithm in ADL

## 5.2 Software and its Presentation, including testing (and video link)

## 5.3 Descriptive Report, including artefacts

### 5.3.1 Experiment Strategy

### 5.3.2 Experiment Results

### 5.3.3 Findings and Discussion

## 5.4 Incorporation of formative feedback