Islamic Education A Summary of Lecture on Human Beings and Religion



Name Muhammad Baihaqi Aulia Asy'ari

NIM 2241720145

Class 1I

 $\begin{array}{c} \textbf{Department} \\ \textbf{Information Technology} \end{array}$

Study ProgramD4 Informatics Engineering

1.1 Learning Objective

After finishing this topic, students must be able to:

- 1. Understand the basic concept of Queue
- 2. Understand the basic operation of Queue
- 3. Implement the Queue concept as well as the operation in a program by using Java

1.2 Lab Activities 1

1.2.1 Steps

1. We will create a program based on this following class diagram

```
max: int
size: int
front: int
rear: int
Q: int[]

Queue(max: int)
create(): void
isFull(): boolean
isEmpty(): boolean
enqueue(data: int): void
dequeue(): int
peek: void
print(): void
clear(): void
```

- 2. Create a new project named Jobsheet8, create a new package with name practicum1. After that, create a new class Queue
- 3. Add max, size, front,rear and Q as its attributes based on the class diagram above.
- 4. Add a constructor with parameter and method create as illustration below.

```
public Queue(int n) {
    max = 4;
    Create();
}
```

Within the constructor, there is a code to execute create(). then we make the create function

```
public void Create() {
   Q = new int[max];
   size = 0;
   front = rear = -1;
}
```