

## Assignment – 05

### Implementation of Design Architecture

#### **Team:**

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#### **Patterns implemented:**

1. MVC [Model View Controller]: MVC is a design software pattern which is used to implement the user interfaces to isolate the program logic with the rest of the program

#### **Model:**

1. TSPKnowledgeSource.java

2. DataRepository.java

3. Control.java

#### **View:**

1. SolutionView.java

2. PlottingArea.java

#### **Controller:**

1. DrawingAreaMouseListener.java

2. MenuActionListener.java

2. Blackboard Pattern: Blackboard is a behavioral design pattern which acts like a computational framework to implement large integrated systems. It is broadly divided into three components:

a. blackboard – a global memory which comprises of objects

b. knowledge sources – modules which their own representation.

c. control component – controls the flow of the model

a. Blackboard : DataRepository.java

b. Control: Control.java

c. Knowledge source: TSPKnowledgeSource.java

3. Color codes for the line

1. Red: minimum distance path

2. Blue: 2<sup>nd</sup> minimum distance path

3. Green: 3<sup>rd</sup> minimum distance path

Note: In order to save the data as a text file please follow the below mentioned format for naming:

“filename”.txt