

# **King Fahd University of Petroleum & Minerals**

## **Department of Information and Computer Science**

### **SWE-205: Introduction to Software Engineering**

#### **Term 191**

#### **Project: *MyPaintShop* – version 1.0**

The idea of the project is to develop a paint tool in Java language. The tool will help users draw various shapes using different colors by dragging the mouse on the canvas. The users should also be able to fill in the inside of the shapes (if applicable). The shapes drawn on the canvas should be selectable. On selecting an already drawn shape, the user can change its properties like color and dimensions or to delete them. Once a user selects a shape, the shape is visually rendered as selected and a page opens on the bottom of the canvas where the dimensions and other properties of the shape are shown and the user can edit the values there. On editing the values, the shape on the canvas changes its appearance in real time. Once the user is done, he can save the drawing as a file which can be opened later. Thus, the options of save, open, etc. should also be available for the user. The application should also have toolbar and menus for selection of shapes, colors etc.

The software shall be user friendly, easy and intuitive to use. It should be flexible so that many of the aspects can be configured. Moreover, the software shall be maintainable to enable features to be added later on.

The company wants the project to be implemented following the waterfall process model using UML as the modeling language. The duration of the project is two calendar months.

The company expects different deliverables to be produced during the development lifecycle to monitor and control the progress. These deliverables are mainly the work products developed during the project like the SRS document, design document, implementation code and a prototype system.