This Document must be completed and submitted by Nov 6, 2022. This document must be approved by the instructor before any work is performed.

Part A – Group Grade

Project Name: Used Car Dealership

Project Description:

A system capable to keeping, displaying, and editing an inventory of cars for the purpose of selling them.

Group Project Members

Student Name(s):

Team Captain: 1) Jarosław Rybak

2) Mohammad Ariz Haider

3) Mohammad U Uddin 4) Anthony Ferrara

5) Fahim Ahmed 6) Satar Hassni

7) 8)

The class will be randomly split into groups of 5 to 7 students. You can switch groups if you find someone willing to swap with you. Those who find that their group is dysfunctional, should contact me and another group will be formed.

The project is divided as follows:

Part B – Group Grade - Requirements/Specification 10%

Typically, one group member oversees requirements/specifications.

Student Name(s):

Jarosław Rybak

Part C – Group Grade Project Diagram 10%

You must include one process flowchart diagram (see figure 1 below) that provides a high-level overview of the whole project.

List of Design Patterns(s) with student who will be implementing it:

Jarosław Rybak - Iterator Pattern

Mohammad Ariz Haider - Memento Pattern

Satar Hassni - Singleton Pattern

Anthony Ferrara - Observer Pattern

Mohammad U Uddin - Strategy Pattern

Fahim Ahmed - Factory Pattern

Part D – Individual Grade 50% In addition, each design pattern requires:

1) a separate document with the name of a group member.
2) the design pattern name,
3) a UML document showing the concrete classes that implement the design pattern (see Figure 2 below), and
4) Just the code that implements your chosen design pattern using the Java coding standard. Just the design pattern code. Should be one or two pages (multiple classes are ok)
5) The design patterns must be part of the group project written in Java.
6) You do not need to implement all the code. Those parts of the project that don't have design patterns can be mocked up.

Your group must implement as many design patterns as there are members of each group. So, for example, a group with five members must complete five design patterns.

Part E Individual Grade 10%

Unit and Component Test Plan

Two unit tests and one component test per group member.

Part F Individual 20%

Presentation

Each team member presents their design pattern portion of the project.

Figure 1 – Sample Process flowchart diagram

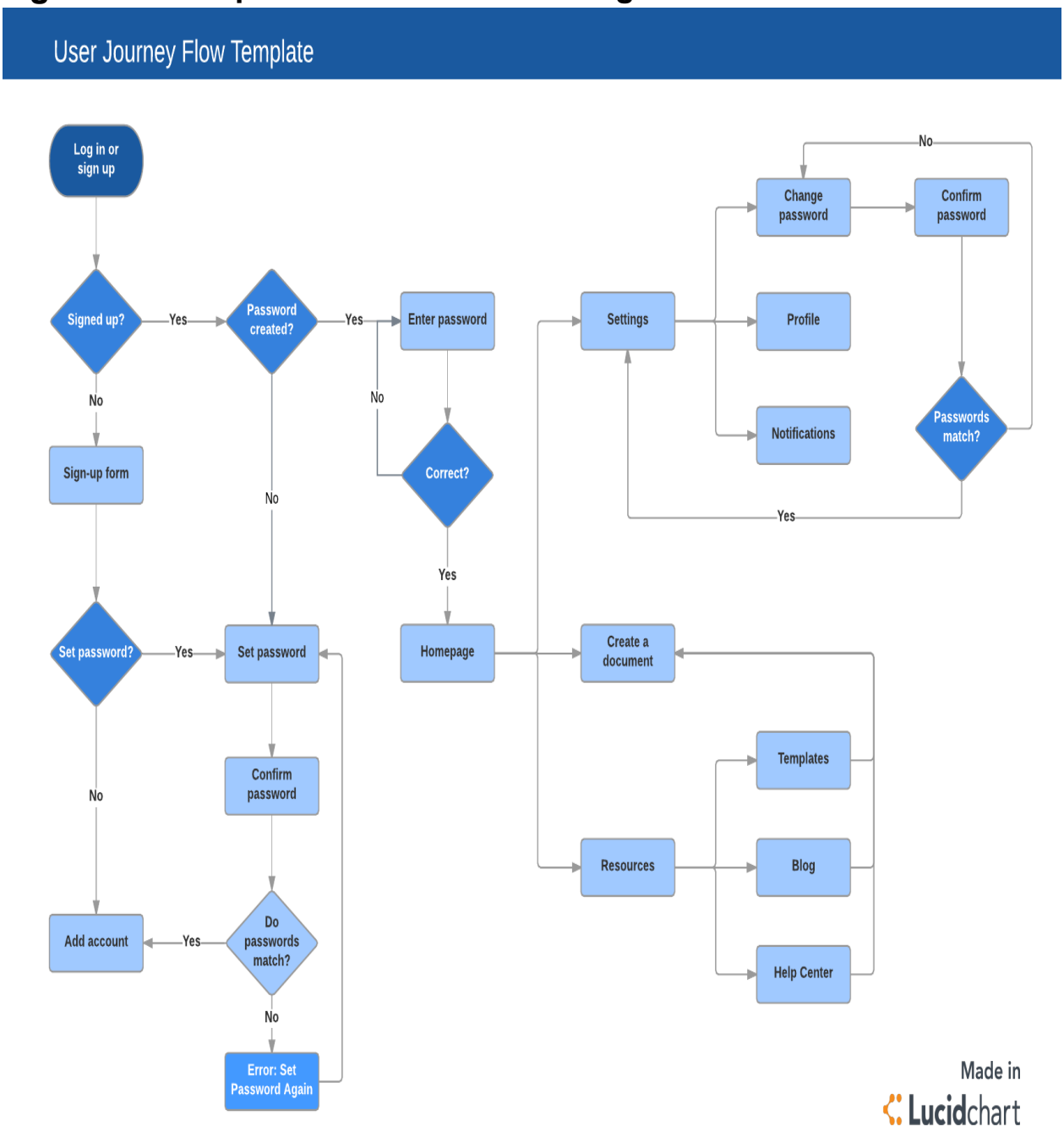

Figure 2 – Sample UML diagram for Observer pattern