Virtual University	**Assignment No. 02** **Semester: Spring 2023** **Software Engineering-1 (CS504)**	**Total Marks: 20** **Due Date: 10/07/2023**

Assignment No. 2 covers lecture 10 to lecture 19.

Objectives:

- **To understand the concept of Requirement Engineering**
- **To have hands-on experience in Use Case Modeling**

Instructions:

Please read the following instructions carefully before submitting the assignment:

- **You should submit your assignment before or on the due date through VULMS.**
- **Your assignment should be your own work in your own words. It should not be copied from the Internet, handouts, or books.**
- **Your Assignment solution must be in Microsoft Word document format. Assignment solutions other than Microsoft Word documents will not be accepted.**
- **Assignments sent via email will not be replied to and accepted.**
- **If the submitted assignment does not open or the file is corrupt, it will not be marked and hence awarded zero marks.**

Case Study: Online Daycare Management System

Early education and care systems play a very significant role in the growth of children, preparing them for school and warranting parents the opportunity to engage in the workforce. It is believed that children need a warm, safe, colorful environment and diversified experience that focuses attention on 'play'. By making these things available, a child will grow and develop at a pace that is just right for them.

The daycare strives to provide quality care for all the children through age-appropriate activities that will help the children grow physically, emotionally, mentally, and socially. High standards for all staff are maintained and the child ratio is kept small to ensure adequate care for each child.

The daycare Management system will make it easy to track and keep a record of children and their parents. The implementation of the system will make it easy for a parent to track children, provide adequate information about children, and register children both new and returning.

The system will consist of two modules: Admin and Parent Module.

- Admin will access to monitor everything. Admin can add, update and delete records. Admin can resolve and notify parents of complaints.
- The parents must create a sign-up/registration. Parents can log in/log out. A parent can register his/her children.
- The parents will pay the monthly fee online.
- The parents can view the babysitter profile assigned to their child.

- The babysitter can log in to the system (after registration) using an id and password.
- The parent should be able to send a request/complaint to admin/support in case of any issue and they will be able to view the complaint status (pending/in-process/resolved).

Besides all this, the system shall be provided with a dynamic and interactive website. When the customer visits the page, its work quickly responds to the task. The system must be easily portable from one platform to another. All the data related to children will be saved and protected by management. This system performs all its functions excellently without any problem. The website will use security protocols and data entered by the user during the sign-up process and parents' login credentials will be kept safe and secure.

Question Statement:

Read the above case study carefully and draw the Class diagram of the online daycare management system by using any of the following recommended tools:

1. Star UML
2. Smart Draw: https://www.smartdraw.com/class-diagram/
3. Visual Paradigm: https://online.visual-paradigm.com/drive/#diagramlist:proj=0&diagram=list
4. Creately: https://app.creately.com/d/40VxC4b8BrU/edit

You are also required to draw a diagram in any of the above-recommended tools, take screenshots or export diagrams as image files, and paste it into MS Word doc.

Note: You are also required to draw relationships (association, aggregation, composition) between classes.

For any query about the assignment, contact CS504@vu.edu.pk

Good Luck !