

Roskilde Daycare

Subjects: SWD & SWC



Project narrative –

Your team is of a small IT-consulting firm, which Roskilde Daycare has requested your services.

Your team, in cooperation with Roskilde Daycare, has begun the development of an administrative IT-system to be mainly used by the daycare's administrator Sandra Madsen, however it will also be used partially by other employees of the daycare. The goal of this project is to develop an IT solution that will aid in the maintaining of the daycare's administrative tasks in an uncomplicated manner (i.e. storing various information). Since Roskilde Daycare is a private institution, it's not coupled to the community's network system as public daycares are. This makes it possible for Roskilde Daycare to obtain its own IT-system - as they are solely responsible for managing and maintaining the daycare's administrative tasks. When a work schedule is created, adding a new child to the books or editing various information – it is done in an assortment of documents such as MS-Office or even on a piece of paper. This has become a time-consuming set of tasks within a high demanding workday. So demanding, that Sandra has commented that she allocates up to 4 hours daily on administrative work.

Examples of administrative tasks are; create a work schedule, a telephone list, a waiting list for new children, parent information, etc. – which, with an IT-system, can be maintained in a more efficient manner. Besides, there is a great disadvantage in the way their information is stored – namely in a local environment without secured copies. This leaves all of the daycare's information in a vulnerable circumstance (for ex.; fire/water damage or theft).

A key element for this IT-solution is that it be user friendly – easy to use within an intuitive environment.

Your team is to develop a prototype of your solution for Roskilde Daycare by adopting your own characterization(s) of the previously mentioned scenario (for ex.; developing all that entails with the registration of children) – see additional details below.

Due to the Corona situation and the advisement by the Danish Authorities, you are to work on the assignment in groups at home (as the school is in locked-down). For this project, your teachers will be assigning the groups (this will be ready Monday 16/3) and you are to create groups/teams in Microsoft Teams so that you can start online group meetings, share your screens, etc.

The project is to be documented in a report uploaded to Fronter containing description of your development, diagrams, snippets of code (commented) and the source code (both JAVA and SQL) attached.

Task: With consideration to the narrative...

- SWD: using design guidelines
 1. Establish an understanding of the problem
 - Conceptual Model
 2. Establish, define and model use cases
 - Use case descriptions/use case diagram
 3. Model software system components
 - Design Class Diagram
 4. Develop a “paper” prototype (in a format of your choosing – paper/digital) for Roskilde Daycare’s administrative program. Test your prototype with “potential” users.
- SWC: in collaboration with SWD
 1. Implement your software solution in JAVA
 - Design your console with regards to your focus group
 - The data is to be stored into files
- Presentation
 1. Create a presentation of your solution
 - Decisions and conclusions

You will have these 2 weeks to work on your project and your teachers will be available -remotely- for guidance.