

# Java - Objected Oriented Programming

## Project: Smart E-health Consulting System

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Course : Java - Objected Oriented Programming  
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### Project Description & Requirements

1. Realize a smart e-health consulting system which consists of a Graphical User Interface (GUI) with the following requirements:

- **Provide a user login for different users** → creation of user profiles and login with username and password (authentication). **Think about encryption methods to use for storing login data in a database.** Admin should be able to:
  - Access to all user profiles
  - Edit user profiles
  - Delete user profiles
- **The user should be able to make an appointment for a specialized medical doctor based on the health problem that he/she is having.** The following information should be used to make a new appointment:
  - First and Last name of patient
  - Address information
  - Date of birth
  - Health information
  - Insurance type (private or public)
  - Insurance name

- Health problem - Based on the health problem specialized doctors should be displayed in a list.
- Distance of search (give the input in kilometer). Depending on the given area of search only the doctors that are near your area should be displayed. After the patient selects a doctor, he/she needs to confirm the appointment. An email should be sent to the patient which confirms the doctor's appointment with the following information:
  - \* Name of the doctor
  - \* Address of the doctor
  - \* Date and Time of appointment.
- Reminder functionality → Drop down menu with the selection:
  - 1 week
  - 3 days
  - 1 hour
  - 10 minutes

The reminder should send a mail to the patient.

2. **The user should be able to cancel or shift the appointment.** After canceling or shifting of the appointment, the patient should receive an email with the changes.
3. **The user should be able to export the health information as a PDF or TXT file.**
4. The source code should include a Javadoc. Javadoc is the user defined API of the used classes, methods and attributes!
5. Provide diagrams (e.g. class diagram, sequence diagram, flow diagram) which describe the software architecture and functionality.
6. Additionally, a project documentation (max. 18 pages) should be written which includes the following:
  - Project description
  - Project motivation
  - Requirements
  - Team organization (Task distribution, Gantt chart)
  - Technical description of solution:
    - Diagrams which illustrate architecture and functionality of the system including a textual description.
    - Description and solution of challenges.
  - Conclusion