

University Dental Clinic System

Use-Case Document

COE 420 Software Engineering
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1. vision History

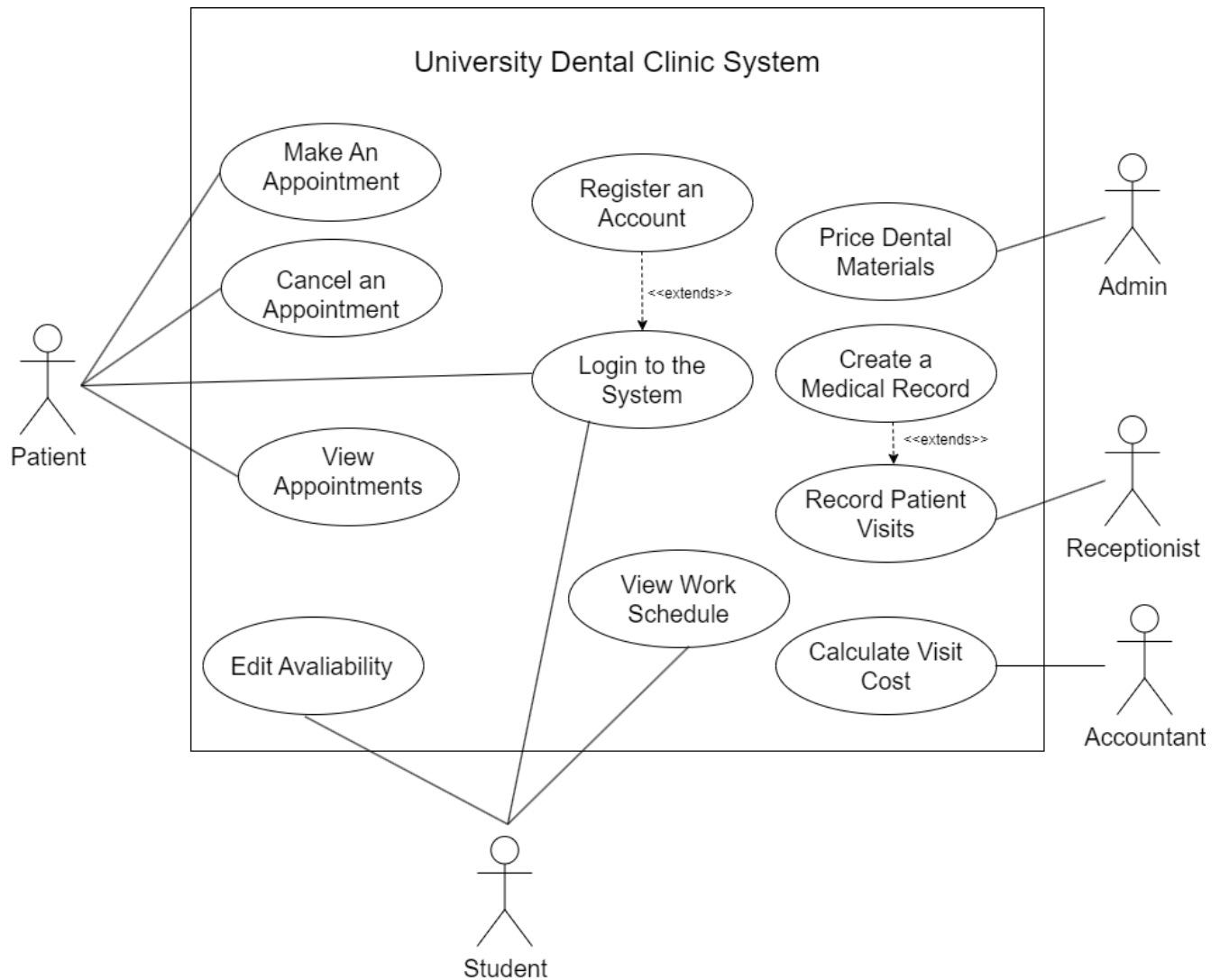
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Version	Date	Comment
Draft	06/10/22	<ul style="list-style-type: none">Added Use-Case Diagram and Full-Dress form for each Use-Case
1.0	10/10/2022	<ul style="list-style-type: none">Edited the document for milestone 1 submission

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2. 1. Use-Case Diagram

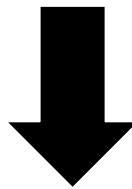


3. 2. Use-case Description

a. UC1: Record Patient Visits

Use Case: Record Patient Visits
ID: UC1
Actors: Receptionist
Description: Receptionist records each time the customer visits any of the given clinics.
PreCondition: <ol style="list-style-type: none">1. The patient has an account on the system.2. The patient has a medical record.3. The patient have made an appointment
PostCondition: <ol style="list-style-type: none">1. The patient can view their visits in the system.
MainFlow: <ol style="list-style-type: none">1. The receptionist navigates to the record patient section.2. The system shows the prompt for recording visits. Extension point: firstPatientVisit, Extension: Create a Medical Record <ol style="list-style-type: none">3. The receptionist inputs information about the patient's visit.4. The receptionist inputs the materials used and their quantity.5. The receptionist links the inputted information to the patient's account.6. The receptionist confirms the details inputted to the system.7. The receptionist saves the information regarding the visit in the system.

Includes:
None.



Use Case: Create a Medical Record

ID:
UC1.1

Actors:
Receptionist

Description:
The receptionist creates a Medical Record for the customer.

PreCondition:
1. The Patient has an account on the system.

PostCondition:
1. The patient can view their own medical record.

Main Flow:
1. The receptionist navigates to the record patient's medical record section.
2. The receptionist inputs information about the patient's health information.
3. The receptionist inputs information about the patient's insurance

information.

4. The receptionist links the inputted information to the patient's account.
5. The receptionist confirms the details inputted to the system.
6. The receptionist saves the information to the system.

Includes:

None.

b. UC2: Calculate Visit Cost

Use Case: Calculate Visit Cost
ID: UC2
Actors: Accountant
Description: Accountant provides a calculated payment for each visit.
PreCondition: 1. The patient's visit is recorded in the system

PostCondition:

1. The patient can view the final payment after the appointment.

MainFlow:

1. The accountant inputs the ID of the recorded visit.
2. The accountant previews the patient visits and the materials used.
3. The accountant uses prices for procedures and material that are provided by the admin through the system to calculate the cost of the visit.
4. The accountant uses the patient's insurance information to deduct the insurance share from the cost of the visit.
5. The accountant confirms and saves the information in the system.

Includes:

None.

c. UC3: Price Dental Materials

Use Case: Price Dental Materials**ID:****UC3**

Actors: Admin
Description: The admin inputs to the system predetermined pricing for dental material and procedures.
PreCondition: <ol style="list-style-type: none">1. The administrator pre-arranges the total cost of the medical procedures and their quantities.
PostCondition: <ol style="list-style-type: none">1. The pricings will be available for the accountant to use in their calculations.
MainFlow: <ol style="list-style-type: none">1. The admin navigates to the pricing section of the system.2. The admin inputs pricing for both dental material and dental procedures.3. The admin confirms and saves the pricing on the system.4. The system would make the pricing available in the system.
Includes: None.

d. UC4: View Work Schedule

Use Case: View Work Schedule
ID: UC4
Actors: Student
Description: The student can view their own work schedule.
PreCondition: <ol style="list-style-type: none">1. The person is a dentistry student.2. The student is authenticated to the system.
PostCondition: <ol style="list-style-type: none">1. The student can view their schedule.
MainFlow: <ol style="list-style-type: none">1. The student navigates to the view appointments part of the system2. The system shows the student's schedule attached to their account
Includes: None.

e. UC5: Edit Availability

Use Case: Edit Availability
ID: UC5
Actors: Student
Description: The student can edit their availability in the system.
PreCondition: 1. The student is authenticated to the system.
PostCondition: 1. The student can verify their availability by viewing it on the system. 2. Patients will be able to see the new version of the student's available timings.
MainFlow: 1. The student navigates to edit their availability on the system. 2. The student selects the slots that they are available in.

- | |
|---|
| 3. The student confirms and saves the timings.
4. The system updates the student's availability on the system. |
| Includes:
None. |

f. UC6: View Appointments

Use Case: View Appointments
ID: UC6
Actors: Patient
Description: The patient can view their upcoming and past appointments.

PreCondition:

1. The patient is authenticated to the system.

PostCondition:

1. Patients can view their appointments that are recorded in the system.

MainFlow:

4. The patient navigates to the view appointment section of the website.
5. The system shows their appointments on the screen.

Includes:

None.

a.

b. UC7: Cancel an Appointment

Use Case: Cancel an Appointment

ID: UC7
Actors: Patient
Description: The patient can cancel an appointment to their liking.
PreCondition: <ol style="list-style-type: none">1. The patient is authenticated to the system.2. The patient must have an existing appointment.
PostCondition: <ol style="list-style-type: none">1. The Patient's appointment has been canceled.2. The assigned student is notified of the cancellation.
Main Flow: <ol style="list-style-type: none">1. The patient navigates to cancel their appointment on the system.2. The system shows the booked appointments that can be edited.3. The patient selects the appointment to be canceled.4. The system shows a prompt to confirm the cancellation.5. The patient confirms the cancellation.6. The system cancels the patient's appointment on the system.
Includes: None.

c. UC8: Make an Appointment

Use Case: Make an Appointment
ID: UC8
Actors: Patient
Description: The patient can book an appointment to any clinic of their preference.
PreCondition: <ol style="list-style-type: none">1. The patient is authenticated to the system.
PostCondition: <ol style="list-style-type: none">1. The Patient made new appointment(s) in the system.2. The assigned student is notified of new appointments.
Main Flow: <ol style="list-style-type: none">1. The patient navigates to make appointment(s) on the system.2. The system prompts the patient to select the clinic that they want.3. The patient chooses the desired clinic4. The system shows available slots in the system according to their assigned student.

5. The patient selects any of the available slots.
6. The patient confirms and books the appointment.
7. The system adds the patient's appointment on the system.

Includes:
None.

d. UC9: Login Account

Use Case: Login Account
ID: UC9
Actors: Patient, Student
Description: The user will be able to login to the system.
PreCondition: 1. An account exists for the user
PostCondition: 1. The user is logged in to the system
Main Flow:

Extension point: firstLogin, Extension: CreateAccount

1. The user inputs their ID and password to the system.
2. The system validates the login credentials.
3. The system logs the user into the system.

Includes:

None.



Use Case: Create an Account

ID:
UC9.1

Actors:
Patient

Description: The user will be able to register in the system.
PreCondition: 1. None
PostCondition: 1. The patient is assigned a unique ID and Password
Main Flow: 1. The patient inputs their information such as their name, address, and phone number. 2. The patient confirms and saves their information. 3. The system adds the patient information to the system. 4. The system generates a unique ID for the patient and a password.
Includes: None.