

FINAL-4
DENTIST APPOINTMENT
SYSTEM

JASKARAN SINGH
YASH KUMAR PATEL

GEORGEY
AKHIL THOMAS

1. Documentation:

1.1. Overview about Application:

This is a Dental appointment system where the patient is provided with medical service by taking an appointment on this application. Patient details like name, age, and gender also have the feature to update and delete the patient details. Patients have an option to review the service after the appointment.

This application also provides the admin to make necessary changes to the time slot for the appointments by adding slots. New employees can be registered and can be viewed in the employee list.

2. Functional overview

2.1 Login Page Details:

This page contains the username and password field where the user enters the username and password details to get access to the main window. If the login credentials are wrong, the system prompts an alert message showing an invalid "username and password." If the username and password are correct, then the user can move to the main page

Developer

Login details

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Login

Login ID:

Password:

Sign In

2.2 Add and View Patients

This page contains all the details which are to be added for patients and can alter the data of added patients.

View And Add Patient Portal

When you click "Add Patient", Patients can be reviewed here

Patient Name:

Patient Gender:

Patient Age:

Patient Id:

Add Patient

View Patients

Save

Delete

Removes Patient

Update

Updates Patients

Edit

Search

Search Using Patient Id

Refresh

Refresh Patients List

Patient ID	Patient Name	Patient Gender	Patient Age

View And Add Patient Portal

When you click "Add Patient", Patients can be reviewed here

Patient Name:

Patient Gender:

Patient Age:

Patient Id:

Add Patient

View Patients

Save

Delete

Removes Patient

Update

Updates Patients

Search

Search Using Patient Id

Refresh

Refresh Patients List

Patient ID	Patient Name	Patient Gender	Patient Age
45	Jaskaran inghee	Male	33
96	Anish Dandedka	Male	11
180	Mayank Mishra	Other	90
187	Jaskaran Singh	Male	12
24	akhil	Male	44
136	nikhilss	Male	22
137	Jojo sdsf	Male	32
173	Eliz	Female	22
164	Joio	Male	76

2.3 Add and View Appointments

This page allows to add and view appointments for the provided services. Customer details can be searched and updated here.

Add and View Patients

Add and View Appointment

Add User

View Users

Logout

View And Fix Appointment Portal

When you click "Book Appointment",Appointments can be reviewed here

Service :

Location:

Patient ID:

Time Slot

Book Appointment

Appointment ID

Service

Location

Time

Patient ID

Status

Change to Treated

Search

Change status of patient

Search Treated by Patient Id

Search

Update

Search Pending Using Appointment

Updates List

Back

Add and View Patients

Add and View Appointment

Add User

View Users

Logout

View And Fix Appointment Portal

When you click "Book Appointment",Appointments can be reviewed here

Service :

Dental_Cleanings

Location:

Home_Treatment

Patient ID:

45

Time Slot

Book Appointment

Appointment ID

Service

Location

Time

Patient ID

Status

887

Dental_Cle

Clinic

13-08-202

70

Treated

346

Root_Cana

Clinic

10-08-202

45

Treated

870

Dental_Cle

Clinic

12-08-202

45

Treated

949

Teeth_Whi

Clinic

12-08-202

96

Pending

915

Bridges

Home_Tre

12-08-202

45

Treated

130

Dental_Cle

Clinic

10-08-202

187

Pending

301

Dental_Cle

Clinic

10-08-202

187

Pending

375

Bridges

Home_Tre

10-08-202

187

Treated

399

Dental_Cle

Clinic

13-08-202

96

Treated

Change to Treated

Search

Change status of patient

Search Treated by Patient Id

Search

Update

Search Pending Using Appointment

Updates List

Back

2.4 Add User

This page is to add new users

Register new employee

Username

Password

Employee ID

Register

2.5 View User

After registering a new user, the details of all registered users is shown in view user as a list.

Employee Id	Username	Password	
24	admin	admin	
28	qwer1	qwer123	
3	akhil	hello	
37	Jaskaran	1234	
45	Anish	Anish	
49	Jaskaran	JASKARAN	
36	nikhil	nikhil	
27	akhil	akhilakhil	
26	Jaskaran	Jaskaran1	
34	asfdsasd	Jaskaran1	

2.6 Logout

This page is to logout from the application after completing the process

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Are you sure to Logout from the System ?

Logout

3. Validation

Create Validation

If any of the fields are empty the alert indicator with message is displayed

Add and View Patients
Add and View Appointment
Add User
View Users
Logout

View And Add Patient Portal

When you click "Add Patient", Patients can be reviewed here

Patient Name:
Robert

Patient Gender:
Male

Patient Age:

Must be filled

Patient Id:

Add Patient

View Patients

Save

Patient ID	Patient Name	Patient Gender	Patient Age
45	Jaskaran inghee	Male	33
96	Anish Dandedk	Male	11
180	Mayank Mishra	Other	90
187	Jaskaran Singh	Male	12
24	akhil	Male	44
136	nikhilss	Male	22
137	Jojo sdsf	Male	32
173	Eliz	Female	22
164	Joio	Male	76

Delete

Removes Patient

Update

Updates Patients

Edit

Search

Search Using Patient Id

Refresh

Refresh Patients List

Button Validation:

Here if any button is pressed before required field is not entered. It will show an error message.

Here row is not selected before pressing delete button

Add and View Patients

Add and View Appointment

Add User

View Users

Logout

View And Add Patient Portal

When you click "Add Patient", Patients can be reviewed here

Patient Name: Robert

Patient Gender: Male

Patient Age:

Must be filled

Patient Id:

Add Patient

View Patients

Save

45Jaskaran ingheeMale33

96Anish DandedkaMale11

180Mayank MishraOther90

187Jaskaran Singh iMale12

24akhilMale44

136nikhilssMale22

137Jojo sdsfMale32

173ElizFemale22

164JojoMale76

Delete

Removes Patient

Update

Updates Patients

Edit

Search Using Patient

Refresh

Refresh Patients List

Select a Patient to be removed

OK

Add and View Patients

Add and View Appointment

Add User

View Users

Logout

View And Fix Appointment Portal

When you click "Book Appointment",Appointments can be reviewed here

Service :

Location:

Patient ID:

Time Slot

Book Appointment

130Dental_CleClinic10-08-202187Pending

301Dental_CleClinic10-08-202187Pending

929Dental_CleClinic11:00:00180Pending

634Dental_CleClinic10:00:0045Pending

160Dental_CleHome_Tre10:00:0045Pending

Change to Treated

Change status of patient

Dental_Cleanings

Search

Search Pending Using Appointment

Back

122

Search

Kindly select an appointment and edit values to be updated

OK

View User:

Here user details can be accessed in the system in a DataGrid view.

Add and View Patients				Add and View Appointment				Add User				View Users				Logout			
Employee Id	Username	Password																	
24	admin	admin																	
28	qwer1	qwer123																	
3	akhil	hello																	
37	Jaskaran	1234																	
45	Anish	Anish																	
49	Jaskaran	JASKARAN																	
36	nikhil	nikhil																	
27	akhil	akhilakhil																	
26	Jaskaran	Jaskaran1																	
34	asfdsasd	Jaskaran1																	

CODE SNAPS AS PER RUBRICS :

- 1.) GUI-Screen Design: Already mentioned above
- 2.) GUI Binding:

```

<Button Content="Book Appointment" x:Name="book_Appointment" HorizontalAlignment="Left" Margin="10,10,0,0"
<DataGrid x:Name="dg_viewAppointments" ItemsSource="{Binding Path=Appointments}" AutoGenerateColumns="False"
    <DataGrid.Columns>
        <DataGridTextColumn Binding="{Binding AppointmentId}" Header="Appointment ID" Width="1.5*" />
        <DataGridTextColumn Binding="{Binding AppointmentType}" Header="Service" Width="*" />
        <DataGridTextColumn Binding="{Binding Location}" Header="Location" Width="*" />
        <DataGridTextColumn Binding="{Binding Datetime}" Header="Time" Width="*" />
        <DataGridTextColumn Binding="{Binding PtntId}" Header="Patient ID" Width="*" />
        <DataGridTextColumn Binding="{Binding Status}" Header="Status" Width="*" />
    </DataGrid.Columns>

```

- 3.) GUI LIST:


```

public void IslandGender()
{
    ptntGender.Add(new PatientGender("Male"));
    ptntGender.Add(new PatientGender("Female"));
    ptntGender.Add(new PatientGender("Others"));
    cb_patient_gender.ItemsSource = ptntGender;
    cb_patient_gender.DisplayMemberPath = "Gender";
}

```

```

1 reference
public void loadTimeSlot()
{
    timeSlot.Items.Clear();
    foreach (var item in slots)
    {
        ComboBoxItem time = new ComboBoxItem();
        time.Content = slots[item.Key];
        timeSlot.Items.Add(time);
    }
}

```

4.) GUI Grids :

```

<StackPanel HorizontalAlignment="Left" Height="421" VerticalAlignment="Top" Width="793" Margin="0,0,0,-0.333">
    <Grid Height="420" Margin="0,0,0.333,0">
        <Grid.ColumnDefinitions>
            <ColumnDefinition Width="688*"/>
            <ColumnDefinition Width="105*"/>
        </Grid.ColumnDefinitions>
    </Grid>

```

5.) GUI ERRORS AND CONVERTER :

```

<TextBox x:Name="txt_empUserName" ToolTip="{Binding ElementName=txt_empUserName, Path=(Validation.Errors)/ErrorContent}" >
    <TextBox.Text>
        <Binding Path="EmpUsername" >
            <Binding.ValidationRules>
                <local:EmployeeUserNameRule/>
            </Binding.ValidationRules>
        </Binding>
    </TextBox.Text>

```

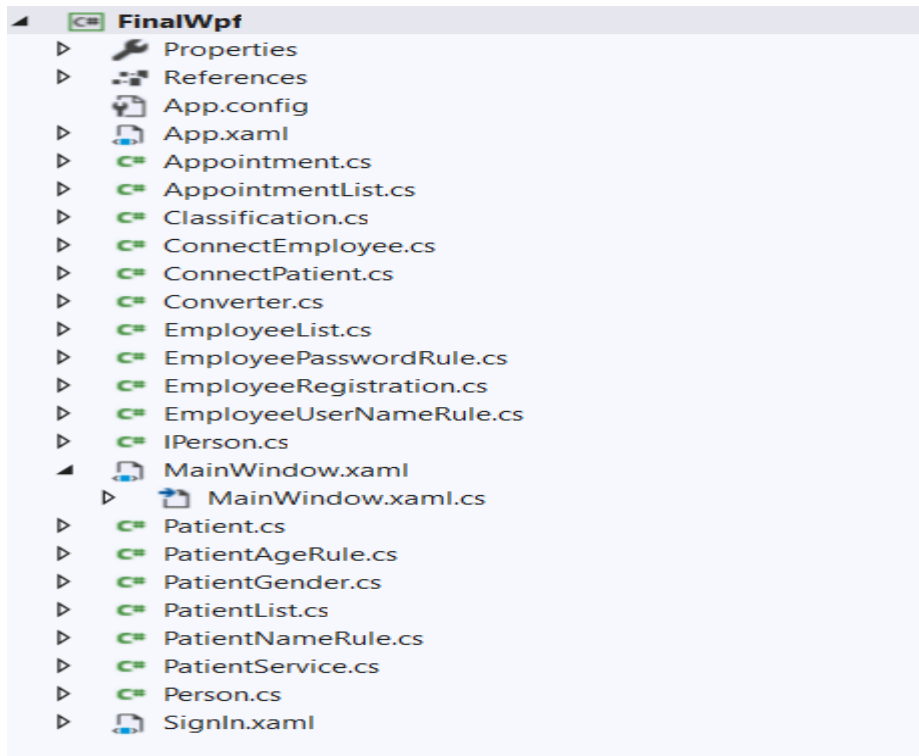
6.) CODE PROPER DISTRIBUTION: Code is divided into different segments separated by comments and code divided into different classes and interface.

7.) USE OF COLLECTIONS:

```
// Accessing Lists
AppointmentList appointmentList = new AppointmentList();
PatientList patientList = new PatientList();

EmployeeList employeeList = new EmployeeList();
```

8.) CODE CLASS DESIGN :



9.) File saving and retrieving:

```
/* _____ XML FILE OPERATIONS _____ */
```

```
//Reading Data from xml
1 reference
public void ReadFromXML()
{
    AppointmentList aptList = null;
    string path = "Final4.xml";
    XmlSerializer serializer = new XmlSerializer(typeof(AppointmentList));
    StreamReader reader = new StreamReader(path);
    aptList = (AppointmentList)serializer.Deserialize(reader);
    reader.Close();
    appointmentList = aptList;
}

//writing data to xml
3 references
public void WriteToXML(AppointmentList appointmentList)
{
    AppointmentList aptList = appointmentList;
    XmlSerializer serializer = new XmlSerializer(typeof(AppointmentList));
    TextWriter txtWriter = new StreamWriter("Final4.xml");
    serializer.Serialize(txtWriter, aptList);
    txtWriter.Close();
    UpdateDataContext();
    dg_viewAppointments.Items.Refresh();
}
```

10.) LINQ

```
/* _____ LINQ _____ */

//Searching
1 reference
public void SearchAppointmentsByPatient(int pId)
{
    //Treated patients
    var qry = from appointment in appointmentList.Appointments where appointment.PntId == pId && appointment.Status == StatusType.Treated select appointment;
    Classification clasf = new Classification("abc");
    clasf.Appointments = new List<Appointment>();
    clasf.Appointments = qry.ToList();
    DataContext = clasf;
    dg_viewAppointments.Items.Refresh();
}

1 reference
public void SearchAppointmentByAppointmentType(AppointmentType appointmentType)
{
    //Searching for pending services
    var qry = from appointment in appointmentList.Appointments where appointment.AppointmentType == appointmentType && appointment.Status == StatusType.Pending select appointment;
    Classification clasf = new Classification("abc");
    clasf.Appointments = new List<Appointment>();
    clasf.Appointments = qry.ToList();
    DataContext = clasf;
    dg_viewAppointments.Items.Refresh();
}
```

CLASS DIAGRAM:

