Guest House Management System

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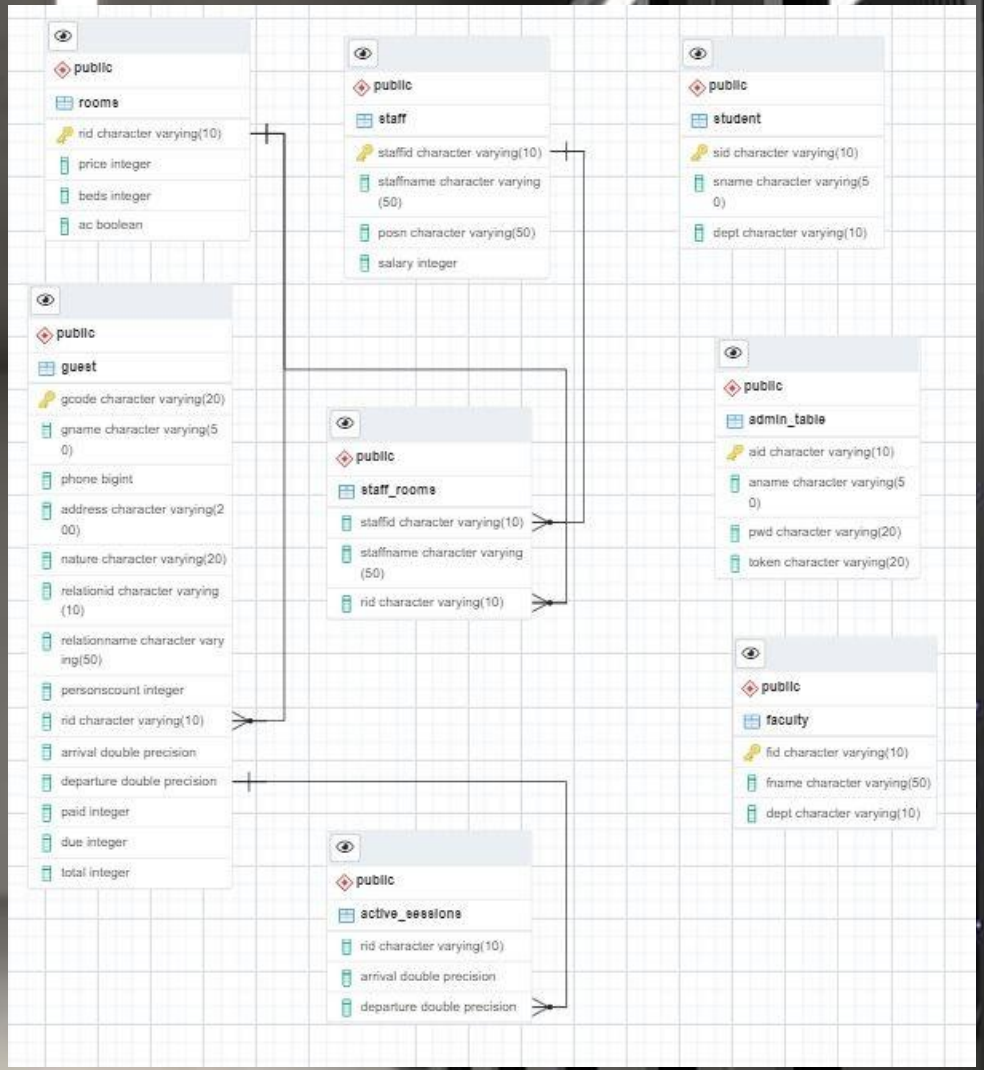
The project intends to provide a solution to implement the Guest House Management System, using a database and web pages to interact with the database.

Tools Used

PostgreSQL
10.15

pgAdmin 4.30
(GUI)

SCHEMA DIAGRAM



- A sequence is a user defined schema bound object that generates a sequence of numeric values.
- Sequences are frequently used in many databases because many applications require each row in a table to contain a unique value and sequences provides an easy way to generate them.

```
CREATE SEQUENCE GUEST_Code
  INCREMENT 1
  MINVALUE 1
  MAXVALUE 9223372036854775807
  START 1
  CACHE 1;

ALTER TABLE Guest ALTER COLUMN GCode SET DEFAULT TO_CHAR(nextval('GUEST_Code'::regclass),'"GC"fm0000');

CREATE SEQUENCE STAFF_Code
  INCREMENT 1
  MINVALUE 1
  MAXVALUE 9223372036854775807
  START 1
  CACHE 1;

ALTER TABLE Staff ALTER COLUMN StaffID SET DEFAULT TO_CHAR(nextval('STAFF_Code'::regclass),'"SF"fm0000');
```

A trigger is a stored procedure in database which automatically invokes whenever a special event in the database occurs. For example, a trigger can be invoked when a row is inserted into a specified table or when certain table columns are being updated.

```
--setRelationName
CREATE OR REPLACE FUNCTION setRelationName ()
    RETURNS trigger
    LANGUAGE plpgsql

AS
$$
BEGIN
    UPDATE Guest
    SET RelationName= FName
    FROM Faculty
    WHERE RelationID= FID AND Nature= 'Faculty' AND RelationName IS NULL;

    UPDATE Guest
    SET RelationName= SName
    FROM Student
    WHERE RelationID= SID AND Nature= 'Student' AND RelationName IS NULL;

    RETURN NEW;

END;
$$;

CREATE TRIGGER Relation_Name
    AFTER INSERT OR UPDATE
    ON Guest
    FOR EACH ROW
    EXECUTE PROCEDURE setRelationName ();
```

FRONTEND

Tools Used

HTML

Describing the structure of the information in a webpage

C++

Deals with elements color, font, layout, etc

REACTJS

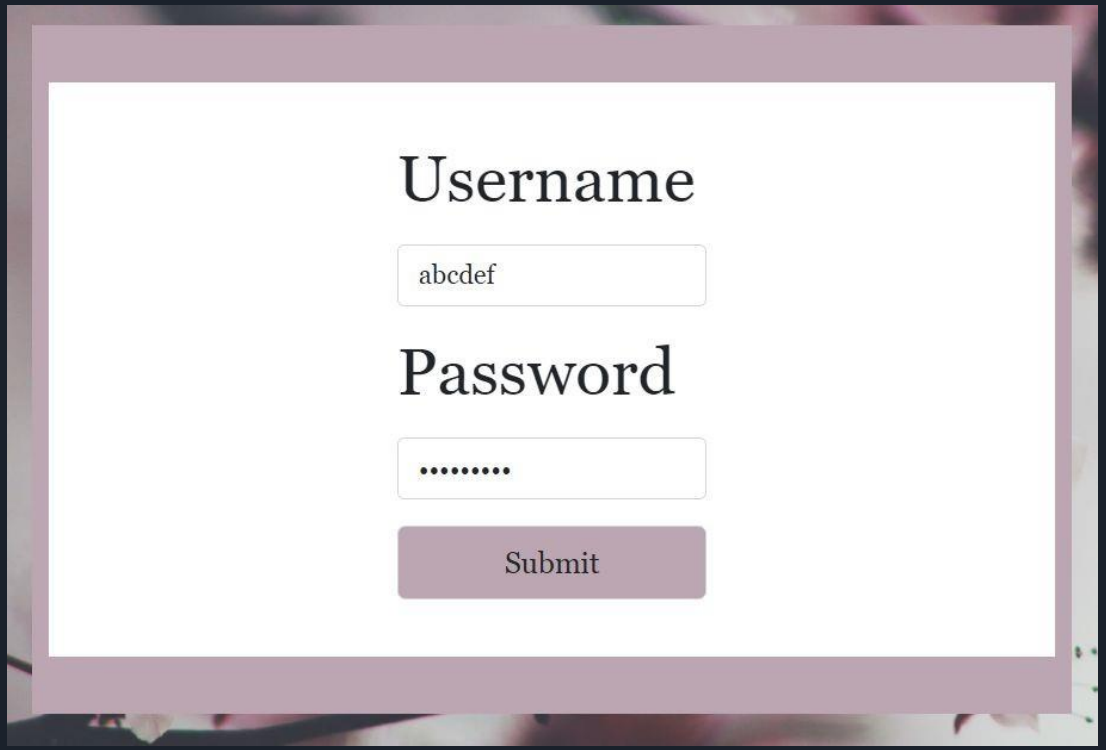
Allows developers to create large web applications which changes data without reloading

Form and its corresponding HTML and CSS codes

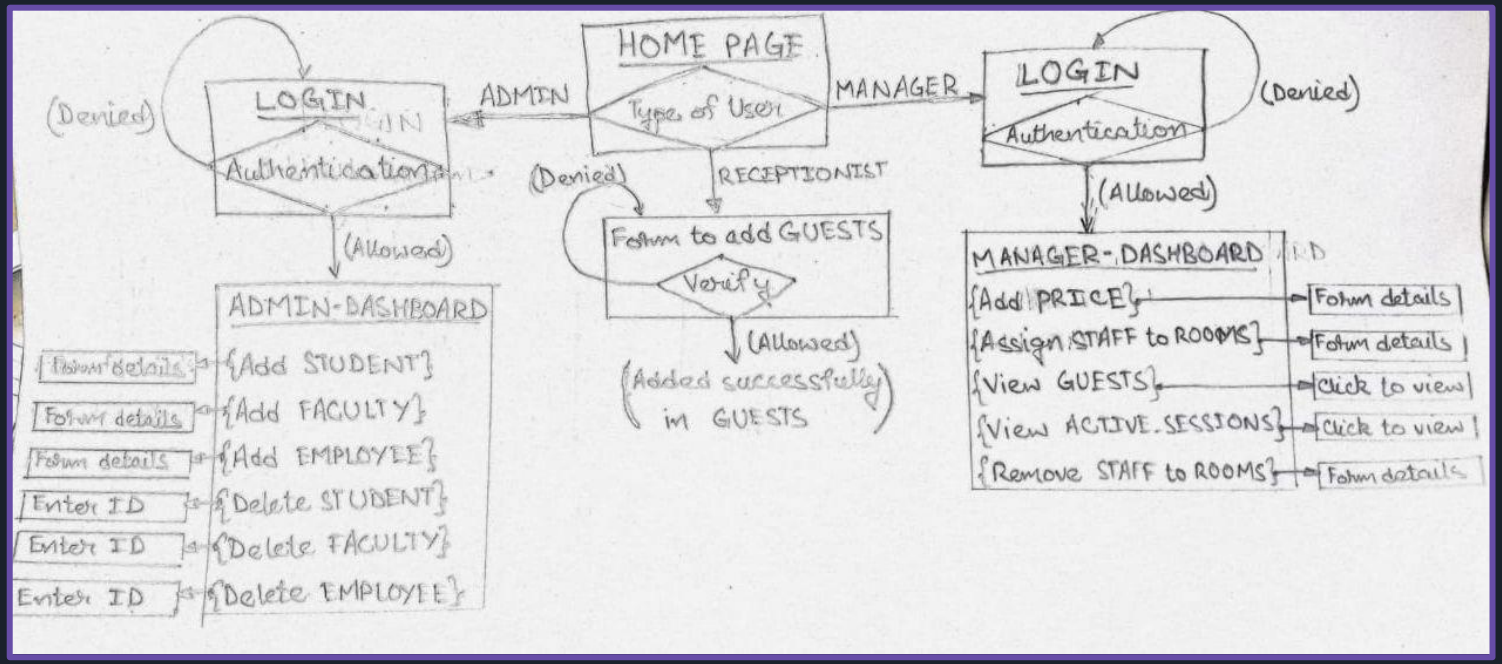
```
<Base
title="Login Page"
description="A page for admin to login"
className="container2"
>
  <div className="stu">
    <div className="row text-dark rounded">
        <div className="col-md-8 offset-md-2">
              {
                  loadingMessage()
              }
              {
                  errorMessage()
              }
              {
                  loginForm()
              }
              {
                  performRediret()
              }
        </div>
    </div>
  </div>
</Base>
```

```
.stu{
   font-family: Georgia;
   font-size: 1.5em;
   background: #FFFFFF;
  padding-top: 35px;
  padding-bottom:35px;
}
```

```
.container2{
  padding-left: 10px;
  padding-right: 10px;
  margin-right: 300px;
  margin-left: 300px;
  padding-top: 35px;
  padding-bottom:35px;
  shape-margin: 25%;
  background: #BBA6B1;
}
```



SITE MAPS & ACTIONS



Thank
you