IMPLEMENTATION DOCUMENTATION

Hardware Requirements:

1. Processor: i3, i5, i7 processor
2. RAM: 4GB+
3. Hard Disk: 20GB+

Software Requirements:

1. Operating System : Windows 8 and above
2. Frontend Technology : Html, CSS, Bootstrap, Java Script
3. Backend Technology : Python(https://www.python.org/downloads/)
4. Framework : Django
5. Database : Mysql(https://www.mysql.com/downloads/)
6. IDE : VS Code(https://code.visualstudio.com/download)

Steps of implementation:

1. Modules should be installed in python:
   - `C:\Users\USER>pip install mysql`
   - `C:\Users\USER>pip install mysql.connector`
   - `C:\Users\USER>pip install django`

2. Download the website.zip file which is attached along with this document.
3. Unzip the file in the desired location
4. Open website folder with VS Code.

5. Open settings.py file and enter your database credentials in DATABASE block and create the database in Mysql with name mentioned in settings.py.
    - CREATE DATABASE schoolmanagement;

```
DATABASES = {
    'default': {
        'ENGINE': 'django.db.backends.mysql',
        'NAME': 'schoolmanagement',
        'USER': 'root',
        'PASSWORD': 'admin',
        'HOST': 'LOCALHOST',
        'PORT': '3306',
    }
}
```

6. Open the terminal and Create user by using this command in the terminal:

```
python manage.py createsuperuser
```

Step 1:Create one user with the name principal

→ username : principal

→Create password for the principal

Step 2:Create another user with the name super

→ username :> super

→Create password for the super

Step 2:Create another user with the name clerk

→ username :> clerk

→Create password for the clerk

7. Run Make migrations:

```
py manage.py makemigrations
```

   - We run the make migrations command in terminal then django will go to models.py file and check for latest modifications.
   - If any migrations are in ORM language then it will be converted into SQL language

8. Run migrate to create tables in database using models.py.

```
py manage.py migrate
```

   - It will create a new python file in migrations folder and save the SQL code.
   - If any python file available in models.py then it will take sql code from that file and execute the database, so it will create table as per django model.

9. Enter runserver command to start the app.

```
python manage.py runserver
```

10. After hitting above commands, web application is deployed using Django and URL displayed in the terminal.

```
Watching for file changes with StatReloader
Performing system checks...

System check identified no issues (0 silenced).
May 31, 2023 - 11:37:40
Django version 4.1.7, using settings 'website.settings'
Starting development server at http://127.0.0.1:8000/
Quit the server with CTRL-BREAK.
```

11. Open the URL in browser and the web application runs in browser.