

Exam Hall Seating Arrangement Project Documentation

1. EC2 Setup & LAMP Installation:

- Launch an EC2 instance with appropriate security groups (allow HTTP port 80).
- Install LAMP stack (Linux, Apache, MySQL, PHP).

2. Uploading Files:

- Use SCP to upload your project to /var/www/html:

```
scp -i "path-to-key.pem" -r "local-path-to-files" ec2-user@ec2-public-ip:/var/www/html
```

- Set directory permissions:

```
sudo chmod -R 755 /var/www/html
```

3. Apache Configuration:

- Edit Apache configuration to serve index.php:

```
sudo vi /etc/httpd/conf/httpd.conf # CentOS/RHEL
```

```
sudo vi /etc/apache2/apache2.conf # Ubuntu/Debian
```

- Add index.php to DirectoryIndex:

```
DirectoryIndex index.php index.html
```

- Restart Apache:

```
sudo systemctl restart httpd # CentOS/RHEL
```

```
sudo systemctl restart apache2 # Ubuntu/Debian
```

4. RDS Setup:

- Create an RDS MySQL instance on AWS and note the endpoint, username, password, and database name.

5. Update Database Connection:

- In the PHP code (index.php), update the connection to RDS:

```
$conn = mysqli_connect("rds-endpoint", "username", "password", "database_name");
```

6. Import SQL Database:

- Connect to RDS MySQL from EC2:

```
mysql -u admin -p -h your-rds-endpoint
```

- Create the database:

```
CREATE DATABASE project;
```

```
USE project;
```

- Import your SQL file:

```
source /var/www/html/project.sql;
```

7. Test the Application:

- Access your application via the EC2 public IP.
- Check functionality to ensure the RDS is correctly connected and the application works as expected.