# Mid Term Progress Report 1

## Project Title: Development of Gapris Collection Website

### Participants:

Project Lead: Gaurav Babu Ghimire

Institution: Lagrandee International College

## 1. Introduction

The midterm progress report outlines the current status of the \*Gapris Collection Website\*, aimed at providing a robust e-commerce platform for showcasing and selling hyperrealism artworks. The website is being developed with a PHP (backend), MS SQL (database), and HTML, CSS, and JavaScript (frontend) without the use of any frameworks.

The goal of the website is to allow art collectors and casual buyers to browse, view detailed descriptions of artworks, and purchase them through an integrated payment API. Additionally, an admin panel is being created to manage inventory, track orders, and facilitate smooth transactions.

## 2. What is Completed?

### 2.1 Backend Structure and Database

1. Database Creation:

- Successfully set up an MS SQL database.  
- Tables for `artworks`, `users`, `orders`, and `transactions` have been created.

2. Database Connectivity:

- Established a connection between the database and the website using PDO for security and flexibility.

### 2.2 Frontend Design

1. Core Pages:

- Designed and implemented the following pages with HTML and CSS:  
 - Home Page: Introduction to \*Gapris Collection\* and featured artworks.  
 - Artwork Listing Page: Displays all artworks with images, descriptions, and prices.  
 - Artwork Details Page: Shows detailed information with a high-quality preview.  
 - Upload Artwork Page: Admin form for uploading new artwork.  
 - Admin Panel: Basic layout for managing inventory and orders.

2. Image Upload Feature:

- Created a working form to upload images.  
- Added preview functionality using JavaScript.

3. CSS Styling:

- Designed a consistent and modern user interface.  
- Responsive layout tested on desktop and mobile devices.

### 2.3 Proof of Concept

The following components demonstrate successful progress:  
- Database connection and retrieval of artwork details.  
- Functional image upload with real-time preview.  
- Admin panel with the ability to edit artwork information.

## 3. What Needs to Be Done?

- Payment Gateway Integration: Implement an online payment API like Khalti or PayPal.  
- User Authentication System: Build login and registration with role-based access control.  
- Order Management: Develop a system for tracking purchases and updating statuses.  
- Artwork Editing Features: Extend admin panel to allow updates and deletions.  
- Testing and Deployment: Conduct comprehensive testing and deploy on a hosting server.

## 4. Bottlenecks

1. Payment Integration:  
- Lack of experience in integrating a payment gateway.  
- Need guidance on setting up APIs and ensuring security.

2. Backend Functionality:  
- Implementing CRUD operations for the artwork inventory is taking longer due to unfamiliarity with PHP.

3. Time Management:  
- Balancing college assignments with project work has caused slight delays.

## 5. Other Issues Hindering Progress

1. Resource Availability:  
- Limited access to advanced PHP and MS SQL resources.  
- Need better sample references for payment integration.

2. Lack of Framework:  
- Developing without frameworks like Laravel adds complexity and increases development time.

3. Image Hosting:  
- Current image uploads are stored locally; need to explore hosting options.

## 6. Conclusion

The \*Gapris Collection Website\* is progressing steadily, with major backend and frontend components implemented. The foundation for the database and core functionalities is complete. However, additional features like payment integration, user authentication, and order management are yet to be developed.

With proper time management and guidance on advanced topics like payment gateways and security practices, the project is expected to meet the final goals.

## Appendix

1. Database Schema Screenshot  
2. Artwork Upload Page Screenshot  
3. Admin Panel Design Screenshot

4. Relevant Code Snippets: Database connection and image upload.

## References

- PHP Official Documentation: https://www.php.net/docs.php  
- MS SQL Tutorials: https://docs.microsoft.com/sql  
- Payment Gateway Integration Guide: https://developer.paypal.com/