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Module Code: PUSL2021	Module Name: Computing Group (23/AY/AU/M)
Coursework Title: Proposal for Computing Group Pr	oject (Group 83)
Deadline Date:	Member of staff responsible for coursework:
10/25/2023	Mr.Pramudya Hashan Thilakarathne
Programme: BSc (Hons)Compute	er Science

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Group work: please list all names of all participants formally associated with this work and state whether the work was undertaken alone or as part of a team. Please note you may be required to identify individual responsibility for component parts.

01	ASK MUWAGAMA	10898852	Creating the GANTT Chart, Researching
02	PFM Silva	10899236	Researching, Main Idea
03	RKM Perera	10898871	Creating the GANTT Chart, Researching
04	MGS Gunasinghe	10900331	Researching, content writing
05	MMD Herath	10899408	Content Writing, Main Idea

We confirm that we have read and understood the Plymouth University regulations relating to Assessment Offences and that we are aware of the possible penalties for any breach of these regulations. We confirm that this is the independent work of the group.

Signed on behalf of the group:

Individual assignment: I confirm that I have read and understood the Plymouth University regulations relating to Assessment Offences and that I am aware of the possible penalties for any breach of these regulations. I confirm that this is my own independent work.

Signed: MMD Herath

Use of translation software: failure to declare that translation software or a similar writing aid has been used will be treated as an assessment offence.

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# **Amusement Park Application Development Proposal**

### **Overview:**

In today's fast-paced world, modern amusement parks face the challenge of meeting the ever-evolving expectations of visitors seeking not only exhilarating rides but also a memorable, streamlined, and immersive experience. To address these dynamic needs, we, a group of second-year Computer Science undergraduates, propose the development of a cutting-edge Amusement Park Application.

This application is not merely a digital supplement but a pivotal component of the modern amusement park experience. It is designed to revolutionize how visitors engage with and navigate through the park, bridging the gap between the analog world of roller coasters and the digital realm of mobile devices.

As we embark on this project, we aim to provide a dynamic, user-friendly, and immersive mobile application that defines the future of amusement park experiences. This application is not just an enhancement; it is a gateway to a world of excitement and convenience, embracing the modern visitor's needs and preferences. Our mission is to bring visitors closer to the park's magic while making their journey more efficient and memorable than ever before.

# **Objective:**

The primary objective of this project is to design and develop a feature-rich mobile application for the amusement park, leveraging the latest technology to improve the overall visitor experience. This application will serve as a one-stop solution for park visitors, offering easy navigation, ticket booking, and essential information, while also enhancing safety through emergency alerts.

#### **Enhanced Visitor Experience:**

We seek to provide park visitors with an immersive, technology-driven platform that elevates their experience, ensuring a memorable and enjoyable visit.

#### **Streamlined Ticketing:**

The integration of a seamless ticket booking system with QR code generation will eliminate long queues and enhance the convenience of access to the park.

#### **Efficient Food Ordering:**

Our application will streamline food ordering and delivery processes, allowing visitors to relish their favorite park treats with minimal waiting times.

#### **Event Management:**

We aim to offer a comprehensive event schedule for visitors, making it effortless for them to plan their day, set reminders, and stay informed about the park's happenings.

#### **Safety and Communication:**

The incorporation of emergency alerts will ensure the safety and well-being of visitors by providing real-time updates on weather conditions and park-related emergencies.

#### **Visitor Empowerment:**

This application will empower park visitors with immediate access to essential park information, enhancing their ability to navigate the park and access vital details.

### Why We're Implementing this Solution:

#### **Enhanced Visitor Experience:**

Modernizing the amusement park experience is essential to meet the expectations of today's tech-savvy visitors.

#### **Efficiency and Convenience:**

By facilitating ticketing, food ordering, and event scheduling through an app, we aim to make the visitor's journey more efficient and convenient.

#### Safety:

In an era of rapid information dissemination, providing real-time emergency alerts and ensuring visitor safety are paramount.

#### **Competitive Advantage:**

Introducing this application will give the amusement park a competitive edge, attracting more tech-savvy visitors and retaining loyal customers.

# **Target Users:**

Our target users include:

- Park Visitors: Individuals and families looking for a convenient way to plan their visit, book tickets, order food, and access real-time information during their park visit.
- Park Management: The park's management team will use the application to send emergency alerts and updates to ensure the safety of visitors.

# **Application Features and Description:**

The Amusement Park Application will include the following key features:

### 1. Interactive Map:

- An interactive map of the park.
- Real-time location tracking for visitors.
- Highlighting key attractions and facilities.

## 2. Ticket Booking using QR Generator:

- Secure ticket booking system.
- Generation of QR codes for contactless park entry.
- Options for ticket type and pricing.

## 3. Food Ordering:

- A food ordering system with menus and customization options.
- Integration with a secure payment gateway.
- Estimated order completion times and pick-up locations.

#### 4. Event Schedule:

- Display of event schedules, shows, parades, and character meetups.
- User ability to set event reminders.
- Push notifications for upcoming events.

## 5. Emergency Alerts:

- A system for sending emergency alerts, weather warnings, and security-related information to users.
- Prompt and reliable delivery of emergency information.

### 6. Park Information:

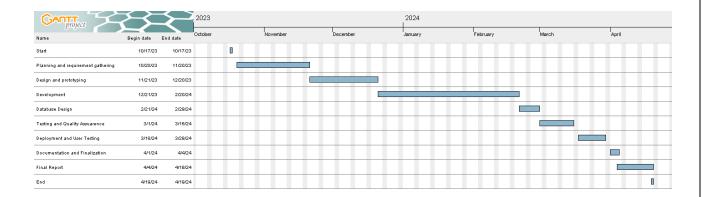
- General Park information, including history, rules, FAQs, and contact details.
- A "Help" or "Support" section to address visitor inquiries.

## **Time Frame:**

Project Start Date: October 27, 2023

Project End Date: April 4, 2024

## **GANTT Chart**



This project proposal outlines our vision for creating a comprehensive Amusement Park Application that will enhance the visitor experience, provide essential services, and ensure visitor safety. We are excited to embark on this project and deliver an application that will make a significant impact on the amusement park's operations.