

COMP 4050 – Group Assignment 3

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Team Name: Mango Madness

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Work Breakdown Structure (WBS)

1. Project Management

- 1.1. Internal Documentation
- 1.2. Client Interactions
- 1.3. Requirements Gathering
- 1.4. Identify Tasks and Resources
- 1.5. Estimate Time and Effort Required
- 1.6. Create a Schedule
- 1.7. Assign Tasks to Team Members

2. Analysis and Design

- 2.1. Market Research
- 2.2. Identify Framework Technologies
- 2.3. Software Architecture
 - 2.3.1. Architecture Diagrams
 - 2.3.2. Sequence Diagrams
 - 2.3.3. Data-Flow Diagrams
 - 2.3.4. Entity-Relationship Diagrams
 - 2.3.5. Outline Structures for Data Transfer Objects
- 2.4. User Experience
 - 2.4.1. User Flow Diagrams
 - 2.4.2. Mockups for User Interface

3. Software Development

- 3.1. Version Control
 - 3.1.1. Create Repository
 - 3.1.2. Establish Branch Protection Rules
 - 3.1.3. Establish Type of Workflow
 - 3.1.4. Assign Collaborator Permissions
- 3.2. Frontend Development
 - 3.2.1. Aesthetic Design

- 3.2.1.1. Layout
 - 3.2.1.2. Color Scheme and Font
 - 3.2.1.3. Menus
 - 3.2.1.4. Buttons
 - 3.2.1.5. Images and Icons
 - 3.2.1.6. Sound Effects
 - 3.2.1.7. Animations
 - 3.2.2. Utilizing Backend Services
 - 3.2.3. Rendering and Response Time
 - 3.2.4. Error Messages
 - 3.2.5. Interactive User Tutorials
- 3.3. Backend Development
 - 3.3.1. API
 - 3.3.1.1. Create Endpoints
 - 3.3.1.2. Create Services
 - 3.3.1.3. Build DTO Structures
 - 3.3.1.4. Create Custom Exceptions
 - 3.3.1.5. Set Up Authentication Provider
 - 3.3.2. Database
 - 3.3.2.1. Create Data Models
 - 3.3.2.2. Create Database Configuration Files
 - 3.3.2.3. Create Database Interface to Perform CRUD Operations
- 4. Present Product to Client
- 5. Testing
 - 5.1. Unit Testing
 - 5.2. Integration Testing
 - 5.3. System Testing
 - 5.4. Automated In-Production Testing
- 6. User Guides and Documentation

- 6.1. Create User Guide Text Document
- 6.2. Create Interactive Tutorials
- 6.3. Create Video Tutorials
- 7. Release
 - 7.1. Develop Automation for Build and Release
 - 7.2. Develop Continuous Integration Pipeline
 - 7.3. Identify Key Performance Indications
 - 7.4. Develop Deployment Tracking
 - 7.5. Deploy to Website and App Store
 - 7.6. Monitor Deployment
- 8. Post-Release Maintenance
 - 8.1. Establish a Help Desk Department
 - 8.2. Train Service Technicians
 - 8.3. Monitor Customer Complaints
 - 8.4. Report Prevalent Troubleshooting Cases to Development Team

Gantt Chart

To view the PDF and PNG version of the Gantt chart, click the link below:

https://drive.google.com/drive/folders/1ILUQp3vzj4F7YdJI6O_byxnflVom_0ju?usp=sharing

PERT Diagram

To view the PDF and PNG version of the PERT diagram, click the link below:

https://drive.google.com/drive/folders/1ILUQp3vzj4F7YdJI6O_byxnflVom_0ju?usp=sharing