**Artisan Connect Documentation**

Chapter 1: Introduction

**Problem Statement**

The lack of a centralized platform to connect artisans with potential clients in a seamless and efficient manner.

**Aim of the Project**

To develop a mobile application that connects artisans to potential clients, enabling easy discovery, communication, and hiring.

**Specific Objectives of the Project**

* To provide a user-friendly interface for clients to search for artisans.
* To allow artisans to showcase their work and manage their profiles.
* To enable direct communication between clients and artisans.
* To implement a rating and review system for quality assurance.

**Justification of Project**

The project addresses the gap in the market for a dedicated platform that bridges the gap between artisans and clients, facilitating better business opportunities and service delivery.

**Motivation for Undertaking Project**

The motivation stems from the need to provide artisans with more visibility and clients with a reliable source to find skilled professionals.

**Scope of Project**

The project includes the development of a mobile app with functionalities such as user registration, artisan search, messaging, profile management, and posting updates.

**Project Limitations**

* Dependence on internet connectivity for full functionality.
* Initial adoption and user base growth.

**Beneficiaries of the Project**

* Artisans seeking to expand their client base.
* Clients in need of skilled artisans.
* The community by fostering local employment.

**Academic and Practical Relevance of the Project**

* Provides a case study in mobile app development using React Native.
* Offers practical insights into user interface design, backend integration, and real-time communication.

**Project Activity Planning and Schedules**

* Requirement gathering and analysis: 2 weeks
* Design and prototyping: 3 weeks
* Development: 8 weeks
* Testing: 3 weeks
* Deployment: 1 week

**Structure of Report**

* Introduction
* Review of Related Works
* Methodology
* Implementation and Results
* Findings and Conclusion

**Project Deliverables**

* Fully functional mobile app
* User documentation
* Technical documentation

Chapter 2: Review of Related Works / Review of Similar Systems

**Processes of the Existing System**

Existing platforms like Thumbtack and TaskRabbit offer similar functionalities.

Pros:

* Established user base
* Comprehensive service listings

Cons:

* May not focus specifically on artisans
* Could be expensive for artisans to join

**The Proposed System**

Artisan Connect aims to offer a dedicated platform specifically for artisans, ensuring more targeted and relevant features.

**Conceptual Design**

* User-friendly interface
* Robust backend for data management
* Real-time messaging capabilities

**Architecture of the Proposed System**

* Client-Server architecture
* Firebase for backend services

**Components Designs and Components Descriptions**

* Authentication: Manages user registration and login
* Search: Allows clients to find artisans
* Messaging: Enables communication between clients and artisans
* Profile Management: Allows artisans to showcase their work and manage their profiles
* Feed: Users can post updates and view posts from others

**Proposed System/Software Features**

* User registration and login
* Artisan search with filters
* Direct messaging
* Profile management
* Posting updates

**Development Tools and Environment**

* React Native for app development
* Firebase for backend services
* Visual Studio Code as the development environment

**Benefits of Implementation of the Proposed System**

* Enhanced visibility for artisans
* Easier access to skilled professionals for clients
* Streamlined communication and service booking process

Chapter 3: Methodology

**Chapter Overview**

This chapter details the methodologies used in the development of Artisan Connect.

**Requirement Specification**

Identifies the requirements needed for the project including functional and non-functional requirements.

**Stakeholders of the System**

* Artisans
* Clients

**Requirement Gathering Process**

Interviews and surveys with potential users to identify key features and requirements.

**Functional Requirements**

* User authentication
* Search functionality
* Messaging system
* Profile management
* Posting updates

**Non-Functional Requirements**

* Security: Secure user data and communication
* Usability: Intuitive user interface
* Performance: Fast and responsive app

**Security Concepts**

* Use of Firebase Authentication for secure login
* Data encryption for secure communication

**Project Methods**

Adopting Agile methodology for iterative development and continuous feedback.

**Chosen Model and Justification**

Agile methodology chosen for its flexibility and iterative approach, allowing for ongoing improvements based on user feedback.

**Project Design Consideration (Logical Designs)**

UI Design:

* Wireframes for each screen

DB Design:

* Firebase as the database

**Developmental Tools**

* React Native for cross-platform development
* Firebase for backend services

Chapter 4: Implementation and Results

**Chapter Overview**

This chapter covers the implementation process and the results obtained.

* Mapping Logical Design onto Physical Platform
* Implementation of UI and backend based on design specifications.
* Construction

**Construction**

Code Snippets:

* Authentication logic
* Search functionality
* Messaging system
* Testing

**Testing**

Testing Plan:

* Unit testing for individual components
* System testing for overall functionality

Results:

* Functional user authentication
* Efficient search and messaging system

Chapter 5: Findings and Conclusion

**Chapter Overview**

* Summary of the project findings and conclusions drawn.
* Findings
* Successful development of a functional mobile app
* Positive feedback from initial users

**Conclusions**

The project successfully bridges the gap between artisans and clients, providing a reliable platform for both parties.

**Challenges/Limitations of the System**

* Dependence on internet connectivity
* User adoption and growth

**Lesson Learnt**

* Importance of user feedback in iterative development
* Effective use of development tools and methodologies

**Recommendations for Future Works**

* Adding more features such as in-app payments
* Expanding to a web platform

**Recommendations for Project Commercialization**

* Marketing strategies to attract more users
* Monetization through premium features for artisans

**References**

[Include all references used in the documentation]