# Riphah International University Islamabad
# Faculty of computing


# Semester Project proposal

## Invoice Management System

### (Project Team)


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# Project Proposal

**Project Title:** Invoice management system

## Opportunity & Stakeholders:

Invoice management system will be a desktop-based application, which will provide the sellers to easily manage their stock and guide user about their product and its prices etc. Seller can save their product information in the database which they can get even from cloud if they want to also they can sell their stocks, make slight adjustments in their prices to satisfy customer needs furthermore, the seller will be able to take a print out of the invoices to have a hardcopy of the deal. The system will have the ability to update or delete any product as per requirement of the seller also system can deal with taxes for better understanding of the price it will also have a decent user interface so that the user can use the software without any hiccups however, it will also be able to handle custom logos or company punch line for having better view of the seller towards their customers moreover the data of the user will have the ability to get imported or exported from the database or vice versa.

Developer will interact with the system in every possible way to help users achieve different types of goals so he/she will be working as a primary actor. Major operations of this system will be performed by admin for better working of system.

Seller will not be needing a person to manage all the orders and manage other financial activity of their sales such as checking monthly sales etc. System will be able to provide them with stats of the financial activities.

The system will have the following stakeholder:

- Seller
- Customer
- Developers

## Existing System/ Description of the Current Situation:

Most of the system that are Invoice management or Invoice management like, they all have less or more problems such as the systems which are web-based mostly are not free to use and lack user's data backup or even if there is backup it might not be useable by the user additionally there are also some software which are not user friendly either, they have low usability making them quite unusable also there are some people who still use old fashion manner of using pen and paper which is even less accurate and secure which is definitely not easy to maintain.

File based system also exist for dealing this purpose but they lack user understandability, creates security problems, data backup is also a problem, data sharing is limited, and many more complexities are also identified.

Most of the existing system have some common problems such as:

- Limited calculation ability of a system.
- Limit of user's data storage,
- Less user-friendly invoices.
- Data entry difficulties for user.
- No Dummy Invoice for user is available.
- Profit loss-based calculations such as monthly profit achieved by Seller etc.

## Problem Statement:

There is more than one problem in these solutions which are provided by different systems that are already being used some common problems are elaborated in few words below.

Many invoices system include some common problems such as:

- Missing invoices (No confirmation, invoice not being in proper place)
- Confusing invoices.
- Wrong or missing contact information.
- Recurring invoice mistakes.
- Missing data
- Checking the quality of invoices.
- Illogical order number.

- Invoice approvals take time.
- User data entering problems.
- Making of custom invoice.

Our system might not be a solution to all those problems however many of problems will be solved through the proposed solution given below.

## Proposed Solution:

Our proposed solution for the above-mentioned problems is given below:

- Provide user the ability to calculate the total stock or profit according to their stock or sales.
- Provide user the presentable way to present the invoice to customers.
- Quick data changes will be made in the system such as after selling items its details will be changed in the system as fast as possible.
- Developer support will be provided to users so that betterment of software is kept under consideration.
- Data provided by the user can also be get by the user in printable form which can then be print by the user as per the need of the user.
- Invoices will be readable and understandable by the user.
- Calculation and amounts can be done and changed manually if the seller needs to in the invoice for more user control.
- System will provide less time in calculation as compared to human calculation on calculator.

## Scope of the Project:

System will have the following module: -

1. Data storage system:
    - Database system will be provided to user so that data loss is reduced, and backup is done easily.
2. Calculation system:
    - This part of the system will perform important calculation such as total cost, monthly profit etc.
3. Printable document provider:
    - System will be able to generate printable information of required data by the user.
    - Invoices will be printable.
4. Import / Export system:

- User will be able to import the data to database or export the data into csv format.

5. Viewer:
    - This part of the system will provide the view of invoice or data.

## Project Plan: (Using Work Breakdown)

## What is Work Breakdown Structure?

## Work Breakdown Structure:

A work breakdown structure (WBS) is deliverable based decomposition of project scope. The WBS includes 100% of the work defined by the project scope and captures all deliverables – internal, external, interim – in terms of the work to be completed, including project management.

**Our WBS: -**

1. **Project Management**

    1.1. Work Breakdown Structure (WBS)

    1.2. Roles & Responsibility Matrix

    1.3. Change Control System

**2. Reports / Documentation**

    2.1. Final Documentation Introduction

    2.2. Literature / Market Survey

    2.3. Requirements Analysis

    2.4. System Design

    2.5. Implementation

    2.6. Testing & Performance Evaluation

    2.7. Conclusion & Outlook

    2.8. End User Documentation

## 3. System

### 3.1. Development Environment

#### 3.1.1. JDK, Net beans, Visual studio code

#### 3.1.2. Git hub

#### 3.1.3. My SQL

### 3.2. Presentation Layer

#### 3.2.1. Deliverable 1

#### 3.2.2. Deliverable 2

### 3.3. Business Logic Layer

#### 3.3.1. Deliverable 1

#### 3.3.2. Deliverable 2

### 3.4. Data Management Layer

#### 3.4.1. Deliverable 1

#### 3.4.2. Deliverable 2

### 3.5. Physical Layer

#### 3.5.1. Deliverable 1

#### 3.5.2. Deliverable 2

## Roles & Responsibility Matrix:

The purpose of roles & responsibility matrix is to identify who will do what.

| WBS # | WBS Deliverable | Activity # | Activity to Complete the Deliverable | Duration (# of Days) | Responsible Team Member(s) & Role(s) |
|---|---|---|---|---|---|
| 1 | 2 | 2.1 | Final Documentation Introduction | 1 | Muhammad Saad Zafar Muhammad Yaseen |
| 2 | 2 | 2.2 | Literature/Market Survey | 1 | Muhammad Saad Zafar Muhammad Yaseen |
| 3 | 2 | 2.3 | Requirements Analysis | 2 | Muhammad Saad Zafar Muhammad Yaseen |
| 4 | 2 | 2.4 | System Design | 2 | Muhammad Saad Zafar Muhammad Yaseen |
| 5 | 2 | 2.5 | Implementation | 1 | Muhammad Saad Zafar Muhammad Yaseen |
| 6 | 2 | 2.6,2.7 | Testing & Performance Evaluation, Conclusion & Outlook | 3 | Muhammad Saad Zafar Muhammad Yaseen |
| 7 | 2 | 2.8 | End User Documentation | 1 | Muhammad Saad Zafar Muhammad Yaseen |
| 8 | 3.1 | 3.1.1, 3.1.2, 3.1.3 | Development Environment (JDK, Net beans, Visual studio code, Git hub, My SQL) | 1 | Muhammad Saad Zafar Muhammad Yaseen |
| 9 | 3.2 | 3.2.1, 3.2.2 | Presentation Layer | 2 | Muhammad Saad Zafar Muhammad Yaseen |
| 10 | 3.3 | 3.3.1, 3.3.2 | Business Logic Layer | 2 | Muhammad Saad Zafar Muhammad Yaseen |
| 11 | 3.4 | 3.4.1, 3.4.2 | Data Management Layer | 2 | Muhammad Saad Zafar Muhammad Yaseen |
| 12 | 3.5 | 3.5.1, 3.5.2 | Physical Layer | 2 | Muhammad Saad Zafar Muhammad Yaseen |