**Project Name: Invoice System**

**Document name**: **Invoice System app**

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1. Introduction

This document serves as a guide for the design and development of Invoice system app. It outlines the project's objectives, scope, requirements and design details.

1. Project Overview

Overview of the project is to creating invoices, paying invoices, and processing overdue invoices

1. Requirements

Paying invoices, and processing overdue invoices.

1. Design Details

* Create a .Net core webAPI project (invoice)
* Create folder to store Invoice details under the project
* Create a new Model folder and create Invoice class file with required fields as below
  + Invoice.cs
    - Id (string)
    - Amount(decimal)
    - PaidAmount (decimal)
    - DueDate (Datetime)
    - Status (String)
* Create a new folder “Repositories” under the project and add a new service class file InvoiceRepository.cs and do the following.
  + Give Repositories as class name and do the following
    - Create new object for List of Invoices and implement below methods.
      * GetInvoice (): To get the Invoice details.
      * AddInvoice ():. To add the invoice details.
      * UpdateInvoice (); To Update the Invoice details.
* Create new InvoicesController under controller folder and do the following.
  + Create a readonly object of Repositories type.
  + Create a constructor which takes Repositories as a parameter and assign the value to the readonly object created above.
* **Add Invoice :** To add Invoice details , user needs to pass the amount and due date in the request body.
* **Get All Invoice** : This will list all the Invoice details.
* **Get Invoice by ID**: This will retrieve the Invoice details based on provided invoice id.
* **PayInvoice**: This method is allow us to pay the amount.
* **ProcessOverdue :** This method is allow us to pay the Overdue amount.

Below are the API endpoints:

