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TODO Application Design

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# Description

## Problem

We need to create an application that will increase users productivity by providing a TODO list management application that is fast, secure and elegant.

## Requirements

We need to be able to synchronize a user’s TODO items across a number of services (including MMS, email and SMS).

# Model

This is the proposed model to cater for managing the list.

## TODOItem

This table holds the following fields:

Title, Description, Due Date, Priority, Type, Created Date

## TODOCollection

This entity contains the following fields:

Title, Description, Type, Created Date

## TODOCollectionMap

Consist of TODOItemId and TODOCollectionId.

# Service

A web service should be created to cater for the retrieval and persistence of a user’s TODO items. This separation of makes it possible to support a number of clients and affords us separation of concerns. The Service layer will include caching. The service will have the following methods:

## FindTODOItemsForUser

## FindCompletedTODOItemsForUser

## FindOutdatedTODOItemsForUser

## PersistTODOItems

## RemoveTODOItmes

## UpdateTODOItems

## ResiterUser

## SubscribeUser

# Consumer

## Web Client

A web client to that consumes the above mentioned Service layer