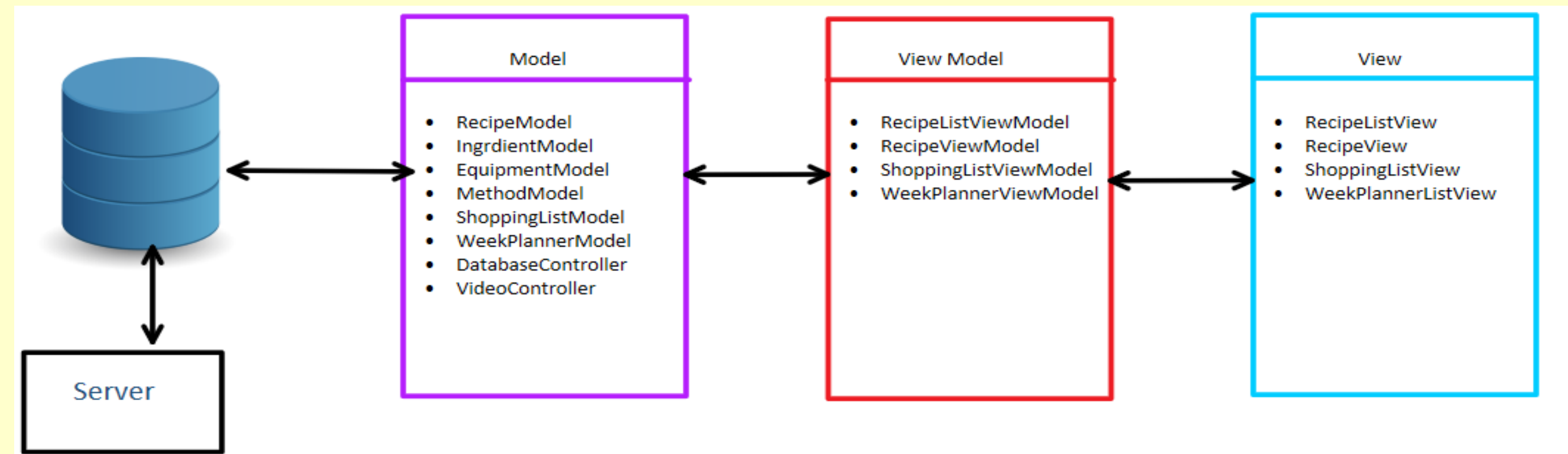# L-Plates

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MSc in Information Technology

Problem and Aim

Healthy cooking on a budget

- Obesity is a leading cause of health problems in Scotland

- One of the challenges, especially for low income groups, is being able to eat healthily within a limited budget.

- Many low income families have limited cooking facilities and often little knowledge of how to cook.

- The L-Plates application aims to support people changing from a diet based on cheap pre-packaged ready meals to meals cooked from scratch based on whole foods that are affordable, easy to obtain, seasonal and healthy.

Model
- RecipeModel
- IngrdientModel
- EquipmentModel
- MethodModel
- ShoppingListModel
- WeekPlannerModel
- DatabaseController
- VideoController

View Model
- RecipeListViewModel
- RecipeViewModel
- ShoppingListViewModel
- WeekPlannerViewModel

View
- RecipeListView
- RecipeView
- ShoppingListView
- WeekPlannerListView

Server

What can we expect?

- **Directory of healthy recipes**
  - A searchable directory of affordable, healthy recipes available at the touch of a button.
- **Instructional videos**
  - Each recipe contains a video with step by step instructions making recipes easier to follow.
- **Ingredient calculator**
  - Calculates the quantity and cost of a meal based on the number of people.
- **Meal Planner and Shopping List**
  - Records what a user has in their cupboard and recommends recipes.
  - Displays ingredients and amounts in an orderly way making shopping more efficient.

How it works.

- Using Xamarin.Forms
  - Xamarin.Forms is a powerful cross-platform development tool that allows use of C# and the .NET framework to power iOS, Android and Windows apps using their native runtime environments.
  - Xamarin.forms uses a single C# code base that runs on all three devices. This allows for 96% of code reuse and easy updating in future development.
- Constraints
  - The app cannot use mobile data so it must download and update using wifi and store images and videos on the phone using compression.