CHEFS' HOUR

ANDROID APPLICATION DEVELOPMENT

CHEFSHOUR: A Food Related Android Application

SUBMITTED BY **GROUP VI**

AMRITA VISHWA VIDYAPEETHAM | School of Engineering

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TEAM MEMBERS

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Introduction

Enables the user with the luxury of choosing recipes from a wide variety of categories just a click away.

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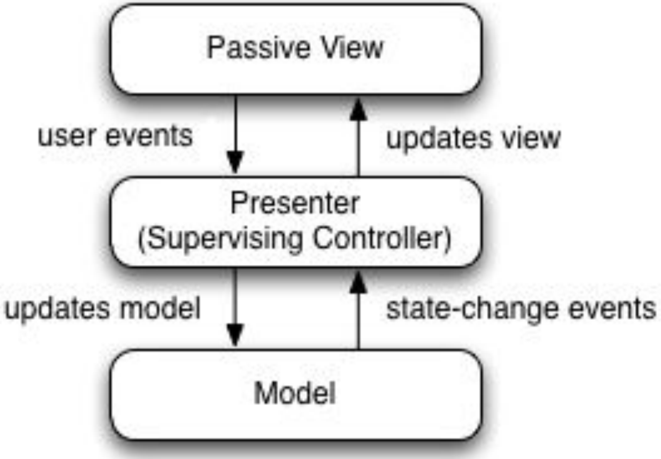
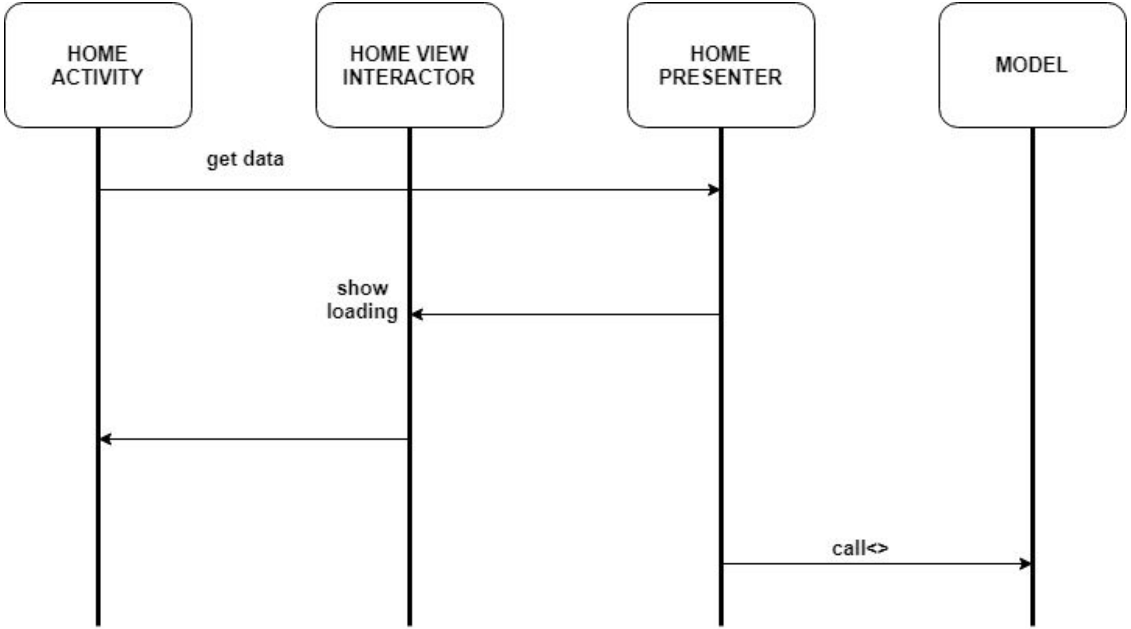
Project Description

- View
- Recipes from Cloud
- Favourites
- Video Demo: YouTube linked
- Source Linked
- Account login (if required)
- Categorical Representation
- Meals API

MVP Architecture



Execution of MVP Architecture



Android Components

- API
- Butterknife
- Retrofit2
- Shimmer (Facebook)

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Meal Database

- Source: TheMealDB
- JSON API
- Converted JSON to JAVA

RecipeID	Recipe Name	Ingredients	Directions	Country	YouTube Link	Source
R01	Aalo Tikki	1 1/2 cups self-rising flour, plus more for kneading, Cooking spray, Greek Yogurt, toppings	If you want to make a good pizza that's fast and easy, this is it. Cooking at a higher temperature (500 degrees F (260 degrees C)) is the key to making this the perfect pizza. It doesn't get any easier than this folks. Brush dough with olive oil and add your favorite toppings. Enjoy!"	Indian	https://www.youtube.com/watch?v=RNZ1ouYfjZk	https://www.indianhealthyrecipes.com/aloo-tikki-recipe/

Android Concepts: Applied from Syllabus

- Constraint Layout, Text view, Edit Text, Button
- Progress bar, Auto Complete Text View, Toast
- Recycler View (Grid/List view), Fragments, Pager Adapter (Array Adapter)
- Implicit and Explicit Intents
- SQLite (Database), Etc…..

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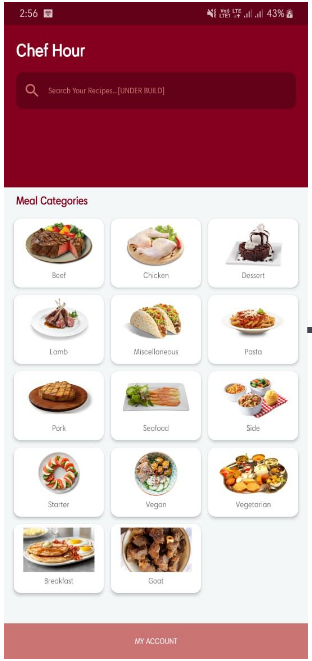
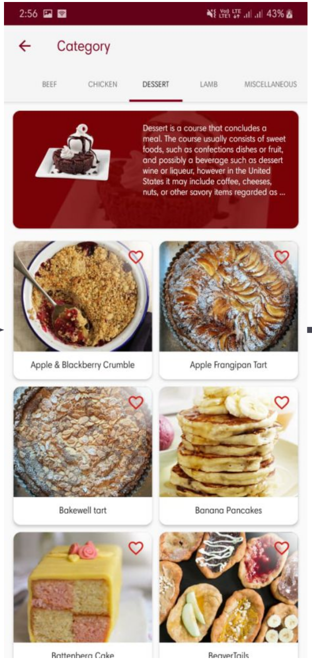
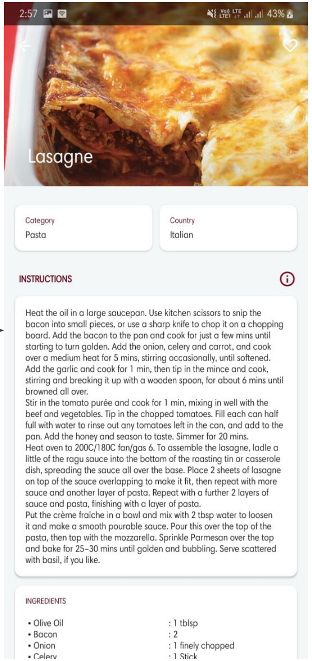
Main Layouts





Dessert is a course that concludes a meal. The course usually consists of sweet foods, such as confections dishes or fruit, and possibly a beverage such as dessert wine or liqueur, however in the United States it may include coffee, cheeses, nuts, or other savory items regarded as ...



Category
Pasta

Country
Italian

INSTRUCTIONS

Heat the oil in a large saucepan. Use kitchen scissors to snip the bacon into small pieces, or use a sharp knife to chop it on a chopping board. Add the bacon to the pan and cook for just a few mins until starting to turn golden. Add the onion, celery and carrot, and cook over a medium heat for 5 mins, stirring occasionally, until softened. Add the garlic and cook for 1 min, then tip in the mince and cook, stirring and breaking it up with a wooden spoon, for about 6 mins until browned all over.
Stir in the tomato purée and cook for 1 min, mixing in well with the beef and vegetables. Tip in the chopped tomatoes. Fill each can half full with water to rinse out any tomatoes left in the can, and add to the pan. Add the honey and season to taste. Simmer for 20 mins.
Heat oven to 200C/180C fan/gas 6. To assemble the lasagne, ladle a little of the ragu sauce into the bottom of the roasting tin or casserole dish, spreading the sauce all over the base. Place 2 sheets of lasagne on top of the sauce overlapping to make it fit, then repeat with more sauce and another layer of pasta. Repeat with a further 2 layers of sauce and pasta, finishing with a layer of pasta.
Put the crème fraîche in a bowl and mix with 2 tbsp water to loosen it and make a smooth pourable sauce. Pour this over the top of the pasta, then top with the mozzarella. Sprinkle Parmesan over the top and bake for 25–30 mins until golden and bubbling. Serve scattered with basil, if you like.

INGREDIENTS

• Olive Oil	: 1 tblsp
• Bacon	: 2
• Onion	: 1 finely chopped
• Celery	: 1 Stick

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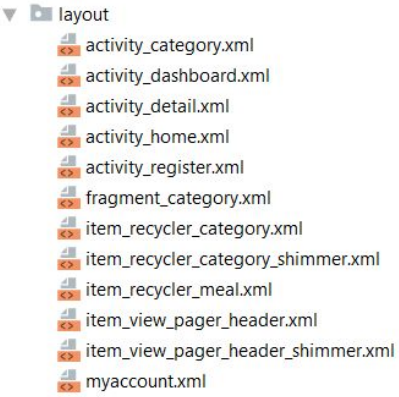
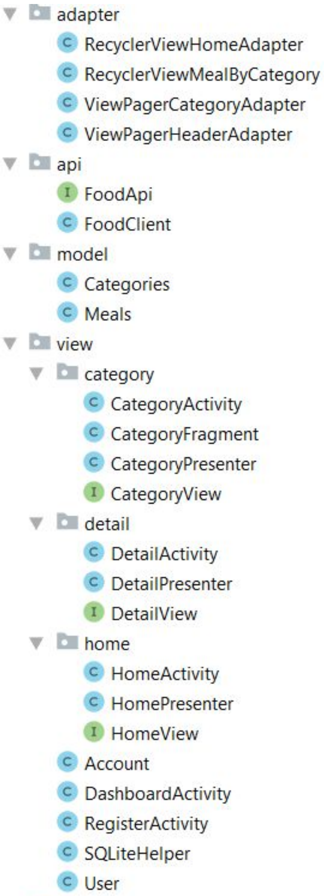
File Structure



```
▼ layout
    activity_category.xml
    activity_dashboard.xml
    activity_detail.xml
    activity_home.xml
    activity_register.xml
    fragment_category.xml
    item_recycler_category.xml
    item_recycler_category_shimmer.xml
    item_recycler_meal.xml
    item_view_pager_header.xml
    item_view_pager_header_shimmer.xml
    myaccount.xml
```



```
▼ adapter
    C RecyclerViewHomeAdapter
    C RecyclerViewMealByCategory
    C ViewPagerCategoryAdapter
    C ViewPagerHeaderAdapter
▼ api
    I FoodApi
    C FoodClient
▼ model
    C Categories
    C Meals
▼ view
  ▼ category
      C CategoryActivity
      C CategoryFragment
      C CategoryPresenter
      I CategoryView
  ▼ detail
      C DetailActivity
      C DetailPresenter
      I DetailView
  ▼ home
      C HomeActivity
      C HomePresenter
      I HomeView
    C Account
    C DashboardActivity
    C RegisterActivity
    C SQLiteHelper
    C User
```

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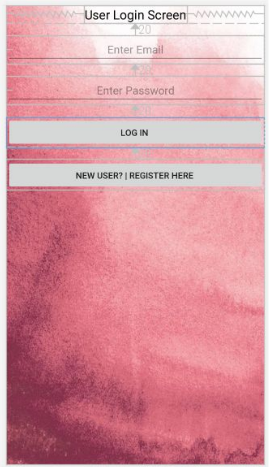
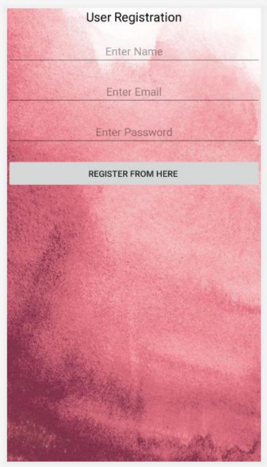
Login And Registration

- User Login
  - Email & Password
- Not Registered?
- New User
  - Name
  - Email
  - Password



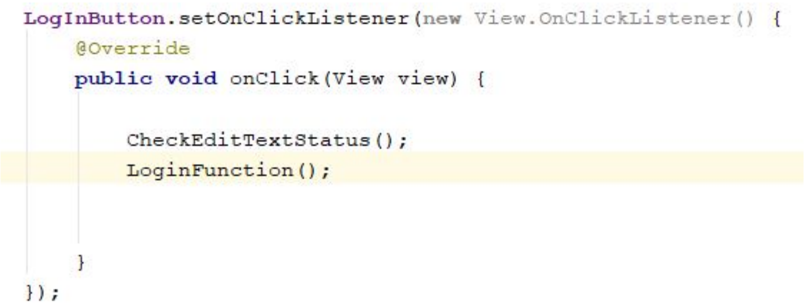


Login Database

- ❑ 4 Attributes
  - ❑ Auto-incremented UserID
  - ❑ Email
  - ❑ Username
  - ❑ Password

User ID	Email	Username	Password
01	arun10@gmail.com	Arun S	**********
02	JVG12@xyz.com	Joseph VG	******
03	natLyon@lol.com	Nathon Lyon	*******
04	perry12@gmail.com	Christina Perry	*********

Login Page



```
LogInButton.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View view) {

        CheckEditTextStatus();
        LoginFunction();


    }
});
```

```
// Opening SQLite database write permission.
sqLiteDatabaseObj = sqLiteHelper.getWritableDatabase();

// Adding search email query to cursor.
cursor = sqLiteDatabaseObj.query(SQLiteHelper. TABLE_NAME,
null, " " + SQLiteHelper. Table_Column_2_Email + "=?", new
String[]{EmailHolder}, null, null, null);

CheckFinalResult();
```

```
public void CheckFinalResult(){


if(TempPassword.equalsIgnoreCase( PasswordHold
er))
   {

         Toast. makeText(Account. this,"Login
Successfully",Toast. LENGTH_LONG).show();
         Intent intent =  new
Intent(Account. this,
DashboardActivity. class);

          intent.putExtra( UserEmail,
EmailHolder);

         startActivity(intent);


   }
   else {

         Toast. makeText(Account. this,"UserName
or Password is Wrong, Please Try
Again.",Toast. LENGTH_LONG).show();

   }
```

Register Page

```
Register.setOnClickListener( new View.OnClickListener() {
    @Override
    public void onClick(View view) {

        // Creating SQLite database if doesn't exists
        SQLiteDataBaseBuild();

        // Creating SQLite table if doesn't exists.
        SQLiteTableBuild();

        // Checking EditText is empty or Not.
        CheckEditTextStatus();

        // Method to check Email is already exists or not.
        CheckingEmailAlreadyExistsOrNot();

        // Empty EditText After done inserting process.
        EmptyEditTextAfterDataInsert();


    }
});
```

```
public void InsertDataIntoSQLiteDatabase(){

    // If editText is not empty then this
block will executed.
   if(EditTextEmptyHolder == true)
   {

        // SQLite query to insert data into
table.
        SQLiteDataBaseQueryHolder = "INSERT
INTO "+SQLiteHelper.TABLE_NAME+"
(name,email,password)
VALUES('"+NameHolder+"', '"+EmailHolder+"',
'"+PasswordHolder+"');";

        // Executing query.

sqLiteDatabaseObj.execSQL(SQLiteDataBaseQuery
Holder);

        // Closing SQLite database object.
        sqLiteDatabaseObj.close();

        // Printing toast message after done
inserting.

Toast.makeText(RegisterActivity.this,"User
Registered Successfully",
Toast.LENGTH_LONG).show();

   }
```

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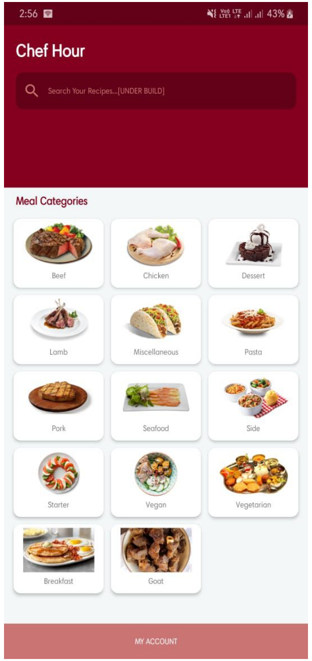
Main Functions Involved

- ❑ showLoading()
- ❑ hideLoading()
- ❑ setMeal()
- ❑ setCategory()
- ❑ onErrorLoading()
- ❑ getcategories()
- ❑ getMeals()
- ❑ initIntent()
- ❑ LoginFunction()
- ❑ CheckFinalResult()
- ❑ InsertDataIntoSQLiteTable()

Home Screen



```
GridLayoutManager layoutManager =  new GridLayoutManager( this, 3,
        GridLayoutManager. VERTICAL, false);
void getCategories() {
    view.showLoading();
  Call<Categories> categoriesCall = Utils. getApi().getCategories();
  categoriesCall.enqueue( new Callback<Categories>() {
        @Override
        public void onResponse(@NonNull Call<Categories> call,
                                           @NonNull Response<Categories> response) {
             view.hideLoading();
             if (response.isSuccessful() && response.body() !=  null) {
                  view.setCategory(response.body().getCategories());
             }
             else {
                  view.onErrorLoading(response.message());
             }
        }
```

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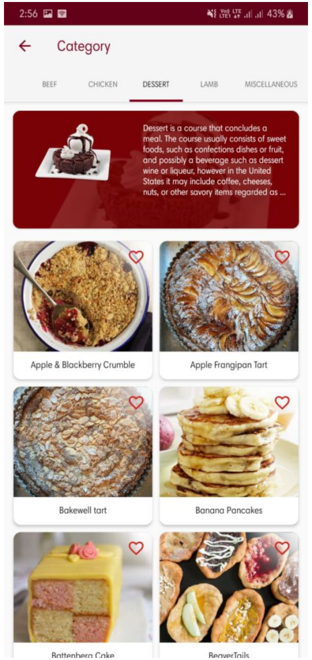
Categorical Screen



2:56 43%

Category

BEEF CHICKEN DESSERT LAMB MISCELLANEOUS

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Apple & Blackberry Crumble

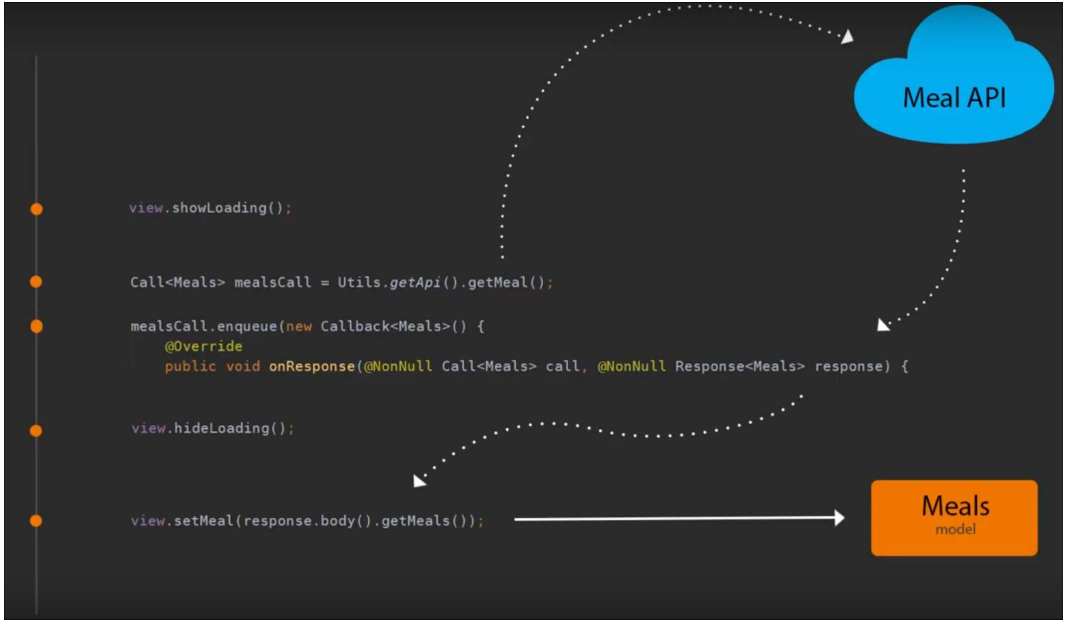
Apple Frangipan Tart

Bakewell tart

Banana Pancakes

Battenberg Cake

BeaverTails



```
view.showLoading();

Call<Meals> mealsCall = Utils.getApi().getMeal();

mealsCall.enqueue(new Callback<Meals>() {
    @Override
    public void onResponse(@NonNull Call<Meals> call, @NonNull Response<Meals> response) {

view.hideLoading();

view.setMeal(response.body().getMeals());
```

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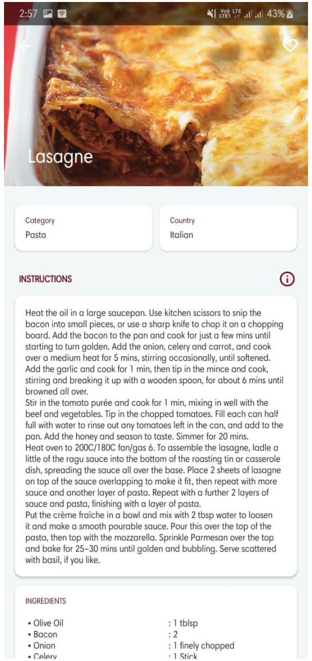
Recipe Screen



Lasagne

Category	Country
Pasta	Italian

INSTRUCTIONS

Heat the oil in a large saucepan. Use kitchen scissors to snip the bacon into small pieces, or use a sharp knife to chop it on a chopping board. Add the bacon to the pan and cook for just a few mins until starting to turn golden. Add the onion, celery and carrot, and cook over a medium heat for 5 mins, stirring occasionally, until softened. Add the garlic and cook for 1 min, then tip in the mince and cook, stirring and breaking it up with a wooden spoon, for about 6 mins until browned all over.
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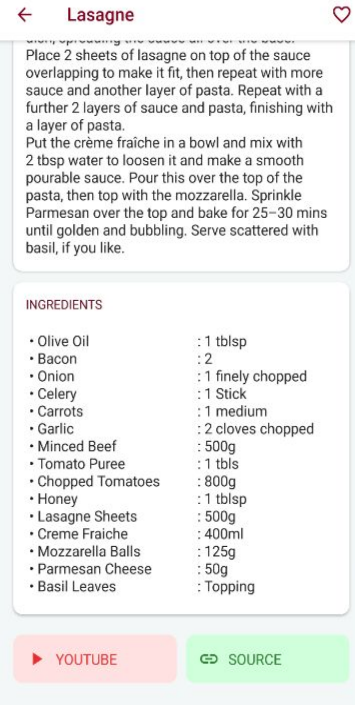

dish, spreading the sauce all over the base.
Place 2 sheets of lasagne on top of the sauce overlapping to make it fit, then repeat with more sauce and another layer of pasta. Repeat with a further 2 layers of sauce and pasta, finishing with a layer of pasta.
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INGREDIENTS

• Olive Oil	: 1 tblsp
• Bacon	: 2
• Onion	: 1 finely chopped
• Celery	: 1 Stick
• Carrots	: 1 medium
• Garlic	: 2 cloves chopped
• Minced Beef	: 500g
• Tomato Puree	: 1 tbls
• Chopped Tomatoes	: 800g
• Honey	: 1 tblsp
• Lasagne Sheets	: 500g
• Creme Fraiche	: 400ml
• Mozzarella Balls	: 125g
• Parmesan Cheese	: 50g
• Basil Leaves	: Topping

```
youtube.setOnClickListener(v -> {
   Intent intentYoutube = new
Intent(Intent.ACTION_VIEW);

intentYoutube.setData(Uri.parse(meal.ge
tStrYoutube()));
   startActivity(intentYoutube);
});

source.setOnClickListener(v -> {
   Intent intentSource = new
Intent(Intent.ACTION_VIEW);

intentSource.setData(Uri.parse(meal.get
StrSource()));
   startActivity(intentSource);
});
```

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Conclusion

This application is extremely handy and useful for cooking a variety of recipes. The Application was tested and successfully Completed.

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Future Additions Possible

- ❑ Search
  - ❑ Search by Title and Ingredients
  - ❑ Search on Recipe ratings
  - ❑ Search Trending Recipes in different categories
  - ❑ Search by category
- ❑ MyRecipeList

Demonstration of the Application

Screen Sharing….

THANK YOU….

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