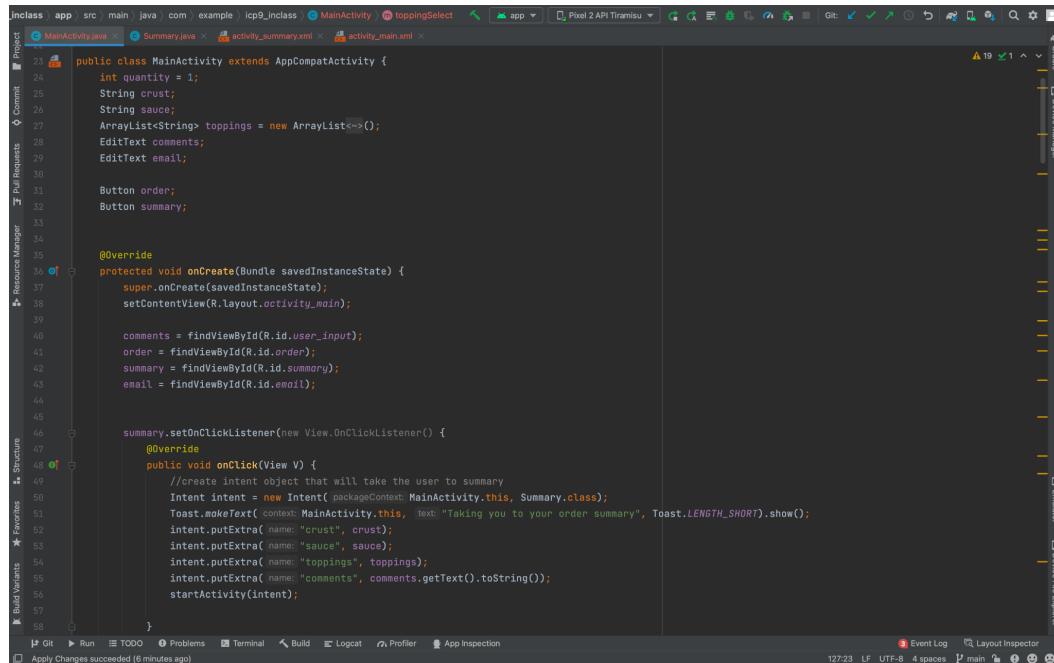


# ICP9

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In this ICP, we created a simple app that will allow the user to order a pizza. The focus of this app is to learn how to use Layouts, Views, and Intents. The main screen features a pizza ordering interface. This interface allows users to build their own pizza. We primarily used a Linear Layout, where each section is a consecutive piece. For some sections, such as the RadioGroup section, we used an interior Linear Layout with a horizontal orientation. We used radio buttons for the crust type and sauce type. These radio buttons are connected in the java file through a switch. The switch sets a ‘crust’ and ‘sauce’ variable. The user then selects toppings via a set of check boxes. These check boxes are connected to another switch and stored in an ArrayList() variable. Finally the user can enter comments that are also stored in a variable. These variables are passed through our different Activities via Intents. We pass the variables by using the Intent method putExtra().

The variables are passed to both a Summary activity where the user can review their order and also a send email activity where the user will be emailed the summary of their order. These activities are started when the user presses the respective buttons.



A screenshot of the Android Studio IDE showing the code for MainActivity.java. The code handles the creation of an Activity, finding views for input fields, and setting up an OnClickListener for a summary button. The summary button's onClick method creates an Intent to start a Summary activity, passing variables like crust, sauce, toppings, and comments via putExtra.

```
public class MainActivity extends AppCompatActivity {
    int quantity = 1;
    String crust;
    String sauce;
    ArrayList<String> toppings = new ArrayList<>();
    EditText comments;
    EditText email;

    Button order;
    Button summary;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);

        comments = findViewById(R.id.user_input);
        order = findViewById(R.id.order);
        summary = findViewById(R.id.summary);
        email = findViewById(R.id.email);

        summary.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View V) {
                //create intent object that will take the user to summary
                Intent intent = new Intent(getApplicationContext(), Summary.class);
                Toast.makeText(context, MainActivity.this, text: "Taking you to your order summary", Toast.LENGTH_SHORT).show();
                intent.putExtra(name: "crust", crust);
                intent.putExtra(name: "sauce", sauce);
                intent.putExtra(name: "toppings", toppings);
                intent.putExtra(name: "comments", comments.getText().toString());
                startActivity(intent);
            }
        });
    }
}
```

## MainActivity.java

The image shows the OnClick for the Summary.

The screenshot shows the Android Studio interface with the code editor open to the `MainActivity.java` file. The code is as follows:

```
//Summary Order to be sent through email
public void sumbitOrder(View view){

    if (!isEmpty()) {

        Bundle extras = getIntent().getExtras();
        if (extras != null) {
            crust = extras.getString("crust");
            sauce = extras.getString("sauce");
            toppings = extras.getStringArrayList("toppings");
        }

    }

    String OS = "Pizza Crust: "
    + crust + "\n" +
    " " +
    " Pizza Sauce: " +
    + sauce + "\n" +
    " " +
    " Pizza Toppings: " +
    + toppings + "\n" +
    " " +
    " Enjoy the Meal 😊";

    String commentTxt = comments.getText().toString();
    Intent emailIntent = new Intent(Intent.ACTION_SEND);

    emailIntent.setType("plain/text");
    // Recipients
    emailIntent.putExtra(Intent.EXTRA_EMAIL, new String[] {"ToCustomer@gmail.com"});
    // Adding Subject
    emailIntent.putExtra(Intent.EXTRA_SUBJECT, value: "Order Summary");
    // Adding the Order Summary Text
    emailIntent.putExtra(Intent.EXTRA_TEXT, OS);
    // Redirecting to Email Intent
    startActivity(Intent.createChooser(emailIntent, title: ""));
}
```

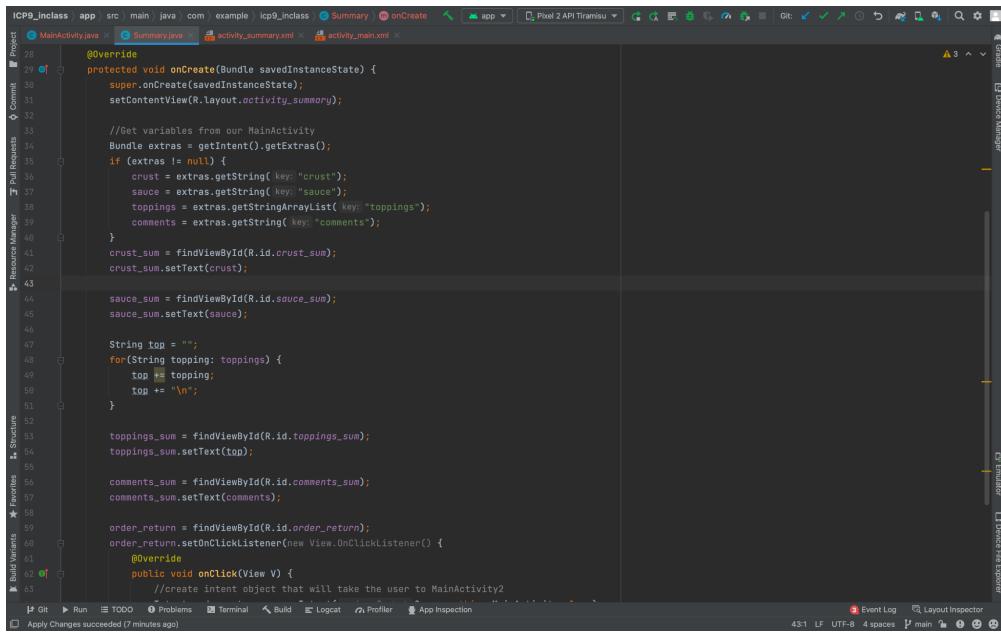
## MainActivity.java

Using a void method to send the email with the user summary of order.

```
10    android:paddingTop="10dp">
11
12    <!--Define a linear layout for the entire activity-->
13    <LinearLayout
14        android:layout_width="fill_parent"
15        android:layout_height="wrap_content"
16        android:orientation="vertical"
17        android:paddingLeft="10dp"
18        android:paddingTop="10dp"
19        android:paddingRight="10dp"
20        android:paddingBottom="10dp"
21        tools:context="MainActivity"
22        android:background="@drawable/img_4"
23    >
24
25    <!--Define a header for the activity-->
26    <TextView
27        android:layout_width="wrap_content"
28        android:layout_height="wrap_content"
29        android:text="Build your Pizza!"
30        android:layout_gravity="center"
31        style="@style/HeaderTextStyle"
32        android:textStyle="bold"
33        android:textSize="30sp"
34        android:textColor="@color/black" />
35
36    <!--Define header for crust section-->
37    <TextView
38        android:layout_width="wrap_content"
39        android:layout_height="wrap_content"
40        android:layout_marginTop="10sp"
41        android:text="Pizza Crust"
42        android:textSize="20dp"
43        android:textAllCaps="true"/>
44
45    <ScrollView>
46        <LinearLayout>
47            <LinearLayout>
48                <Linearlayout>
```

## Activity main.xml

Using a pizza image as the background of the layout. Also adding some touches so the words and buttons are noticeable.



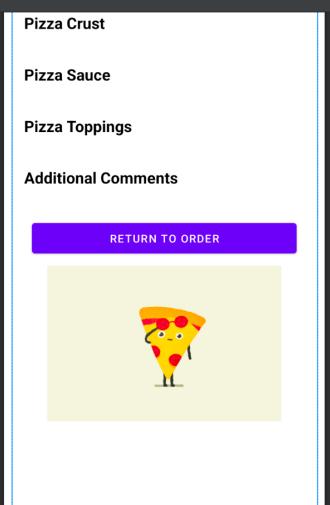
```

28
29     @Override
30     protected void onCreate(Bundle savedInstanceState) {
31         super.onCreate(savedInstanceState);
32         setContentView(R.layout.activity_summary);
33
34         //Get variables from our MainActivity
35         Bundle extras = getIntent().getExtras();
36
37         if (extras != null) {
38             crust = extras.getString(key: "crust");
39             sauce = extras.getString(key: "sauce");
40             toppings = extras.getStringArrayList(key: "toppings");
41             comments = extras.getString(key: "comments");
42         }
43
44         crust_sum = findViewById(R.id.crust_sum);
45         crust_sum.setText(crust);
46
47         sauce_sum = findViewById(R.id.souce_sum);
48         sauce_sum.setText(sauce);
49
50         String top = "";
51         for(String topping: toppings) {
52             top += topping;
53             top += "\n";
54         }
55
56         toppings_sum = findViewById(R.id.toppings_sum);
57         toppings_sum.setText(top);
58
59         comments_sum = findViewById(R.id.comments_sum);
60         comments_sum.setText(comments);
61
62         order_return = findViewById(R.id.order_return);
63         order_return.setOnClickListener(new View.OnClickListener() {
64             @Override
65             public void onClick(View V) {
66                 //create intent object that will take the user to MainActivity2
67             }
68         });
69     }
70 }

```

## Summary.java

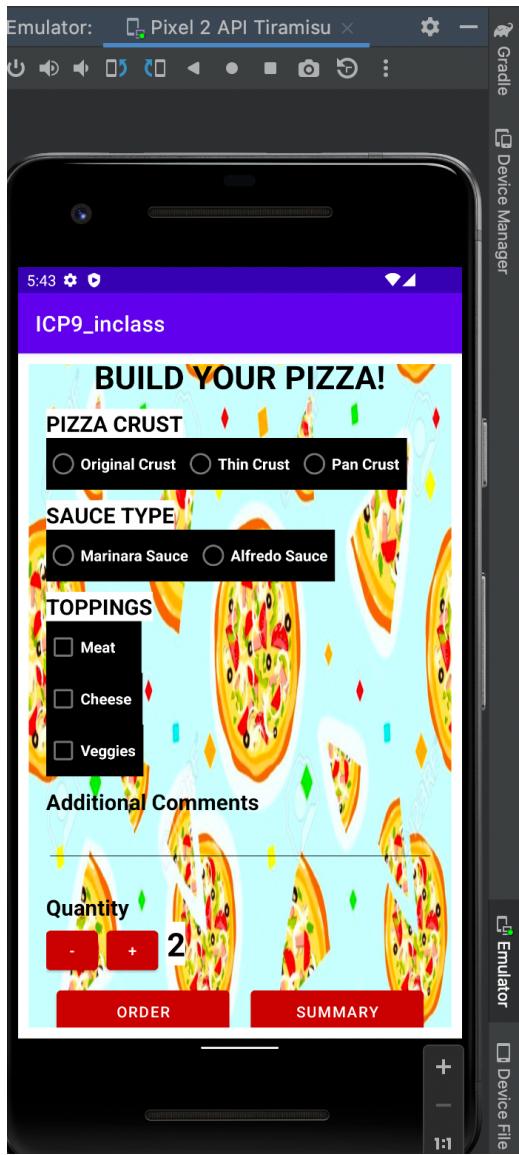
We had to create a new page to, when the user clicked on summary, the user would see their Summary Order. The Summary had to link with the buttons on the MainActivity page by using the Intent to link the pages together. Also using the putExtra to link the pages together.



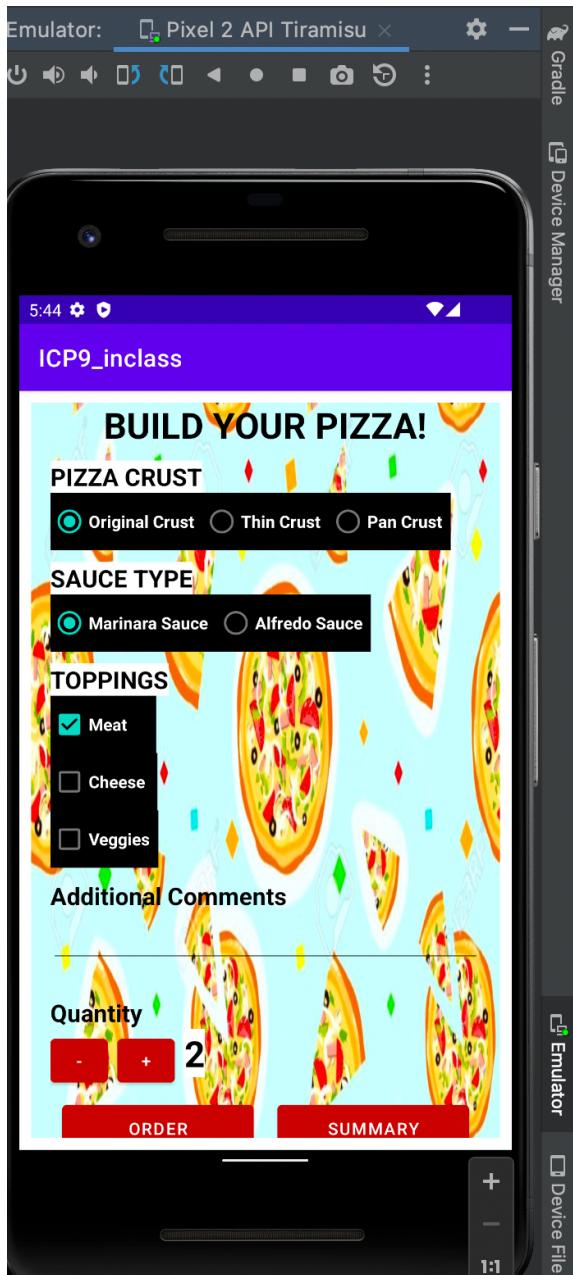
```

81
82         android:text="">
83
84         <!--Define header for comments section-->
85         <TextView
86             android:layout_width="wrap_content"
87             android:layout_height="wrap_content"
88             android:layout_marginTop="10sp"
89             android:text="Additional Comments"
90             android:textStyle="bold"
91             android:textColor="@color/black"
92             android:textSize="20dp"/>
93
94         <TextView
95             android:id="@+id/comments_sum"
96             android:layout_width="wrap_content"
97             android:layout_height="wrap_content"
98             android:layout_marginTop="10sp"
99             android:text="">
100
101         <Button
102             android:id="@+id/order_return"
103             android:layout_width="fill_parent"
104             android:layout_height="wrap_content"
105             android:layout_margin="10dp"
106             android:padding="10dp"
107             android:text="Return to Order"/>
108         <ImageView
109             android:layout_width="300dp"
110             android:layout_height="200dp"
111             android:background="@drawable/img_5"
112             android:layout_gravity="center"
113             android:layout_below="@+id/order_return"/>
114
115     </LinearLayout>
116 </ScrollView>
117 <Imageview
118     android:layout_width="300dp"
119     android:layout_height="200dp"
120     android:background="@drawable/img_5"
121     android:layout_gravity="center"
122     android:layout_below="@+id/order_return"/>
123 </ScrollView>
124
125 
```

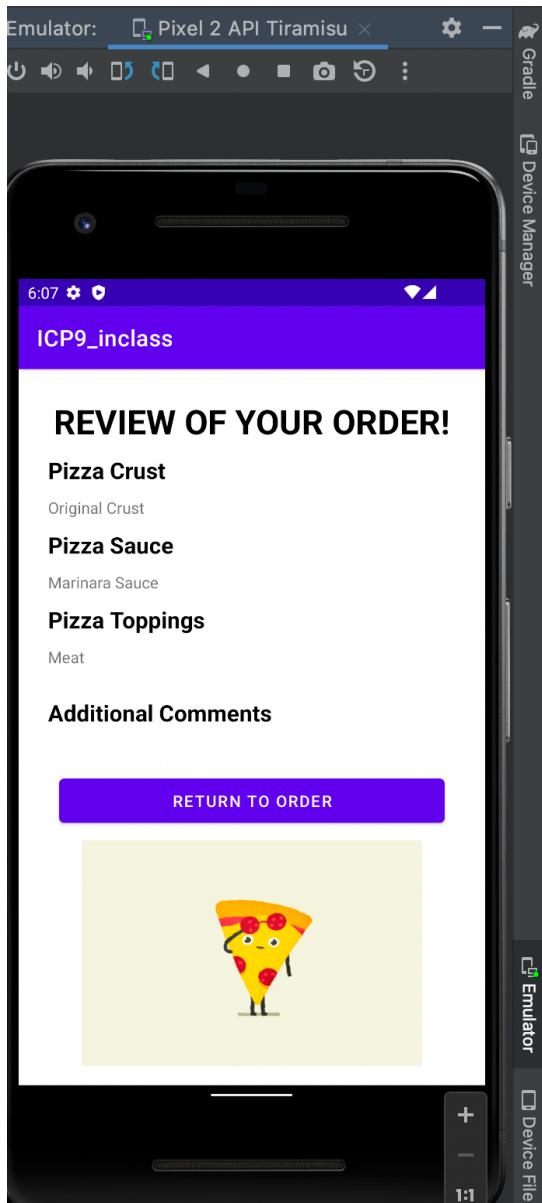
## summary.xml



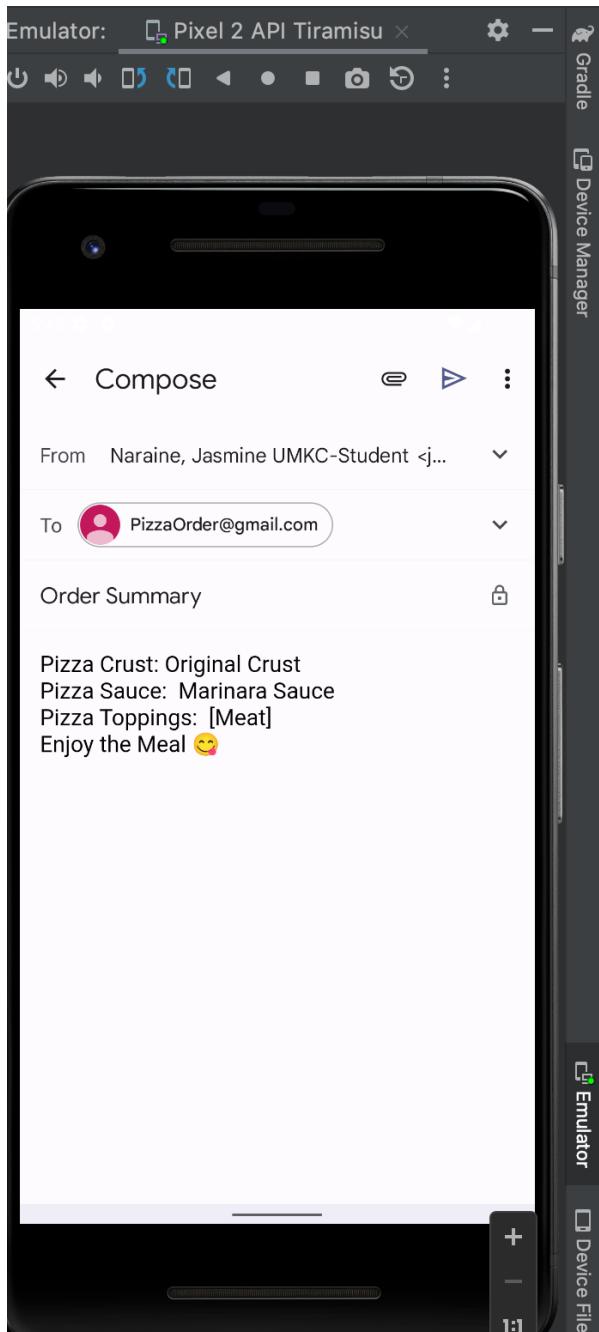
Build your pizza homepage. The homepage also includes an email address for the user to see their Summary Order.



Show that a user can click on their preferred toppings.



The user can review their order. Also they can return to their order, if they want to change anything.



As the user click on the Order Button, they will be redirected to the email to see their summary order.