Software Development for Mobile Devices
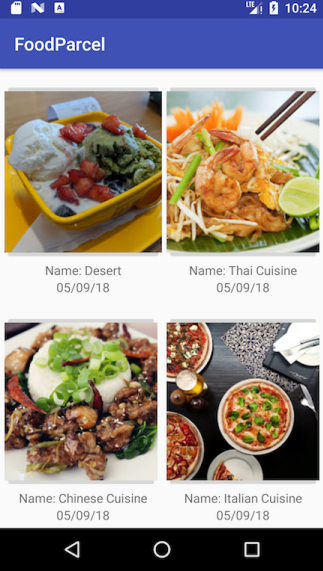
Submission for Assignment A5.2P

Task Enhancing our favourite foods

App Screen

Activity	Screen
MainActivity	

FoodActivity	

Parcelable Object

```java
public class Food implements Parcelable{
    private String name;
    private String imageURL;
    private String keywords;
    private Date date;
    private int rating;
    private String owners;
    private boolean shareable;

    public int getImageRef() {
        return imageRef;
    }

    public void setImageRef(int imageRef) {
        this.imageRef = imageRef;
    }

    private int imageRef;

    public boolean isShareable() {
        return shareable;
    }

    public void setShareable(boolean shareable) {
        this.shareable = shareable;
    }

    public Food (String name,String imageURL, int imageRef, String keywords, Date
date, int rating, String owners) {
        this.name = name;
        this.imageURL = imageURL;
        this.imageRef = imageRef;
```

```java
        this.keywords = keywords;
        this.date = date;
        this.rating = rating;
        this.owners = owners;
        this.shareable = false;
    }

    public String getName() {
        return name;
    }

    public void setName(String name) {
        this.name = name;
    }

    public String getImageURL() {
        return imageURL;
    }

    public void setImageURL(String imageURL) {
        this.imageURL = imageURL;
    }

    public String getKeywords() {
        return keywords;
    }

    public void setKeywords(String keywords) {
        this.keywords = keywords;
    }

    public Date getDate() {
        return date;
    }

    public void setDate(Date date) {
        this.date = date;
    }

    public int getRating() {
        return rating;
    }

    public void setRating(int rating) {
        this.rating = rating;
    }

    public String getOwners() {
        return owners;
    }

    public void setOwners(String owners) {
        this.owners = owners;
    }

    @Override
    public int describeContents() {
        return 0;
    }

    @Override
```

```java
    public void writeToParcel(Parcel dest, int flags) {
        dest.writeString(this.name);
        dest.writeString(this.imageURL);
        dest.writeString(this.keywords);
        dest.writeLong(this.date != null ? this.date.getTime() : -1);
        dest.writeInt(this.rating);
        dest.writeString(this.owners);
        dest.writeByte(this.shareable ? (byte) 1 : (byte) 0);
        dest.writeInt(this.imageRef);
    }

    protected Food(Parcel in) {
        this.name = in.readString();
        this.imageURL = in.readString();
        this.keywords = in.readString();
        long tmpDate = in.readLong();
        this.date = tmpDate == -1 ? null : new Date(tmpDate);
        this.rating = in.readInt();
        this.owners = in.readString();
        this.shareable = in.readByte() != 0;
        this.imageRef = in.readInt();
    }

    public static final Creator<Food> CREATOR = new Creator<Food>() {
        @Override
        public Food createFromParcel(Parcel source) {
            return new Food(source);
        }

        @Override
        public Food[] newArray(int size) {
            return new Food[size];
        }
    };
}
```

The reason using Parcelable object in this application is to pass a food instance from

MainActivity to FoodActivity and vice versa.

Styles

```xml
<style name="App_EditTextStyle" parent="@android:style/Widget.EditText">
    <item name="android:textColor">@color/colorPrimary</item>
    <item name="android:textSize">12sp</item>
</style>
```

MainActivity

```java
public class MainActivity extends AppCompatActivity {

    ImageButton imgBtn1;
    ImageButton imgBtn2;
    ImageButton imgBtn3;
    ImageButton imgBtn4;

    TextView txtCuisine1;
    TextView txtCuisine2;
```

```java
    TextView txtCuisine3;
    TextView txtCuisine4;

    TextView txtDate1;
    TextView txtDate2;
    TextView txtDate3;
    TextView txtDate4;

    Food food1;
    Food food2;
    Food food3;
    Food food4;

    private static final String INTENT_IMAGE_KEY = "image";
    private static final String INTENT_DESCRIPTION_KEY = "description";
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        initializeUI();
    }

    private void initializeUI() {
        imgBtn1 = findViewById(R.id.imgBtnFirst);
        imgBtn2 = findViewById(R.id.imgBtnSecond);
        imgBtn3 = findViewById(R.id.imgBtnThird);
        imgBtn4 = findViewById(R.id.imgBtnFourth);

        txtCuisine1 = findViewById(R.id.txtCuisineName1);
        txtCuisine2 = findViewById(R.id.txtCuisineName2);
        txtCuisine3 = findViewById(R.id.txtCuisineName3);
        txtCuisine4 = findViewById(R.id.txtCuisineName4);

        txtDate1 = findViewById(R.id.txtDate1);
        txtDate2 = findViewById(R.id.txtDate2);
        txtDate3 = findViewById(R.id.txtDate3);
        txtDate4 = findViewById(R.id.txtDate4);

        food1 = new Food("Desert", "https://www.google.com.au", R.drawable.desert,
"desert", new Date(), 2, "abc@gmail.com");
        food2 = new Food("Thai Cuisine", "https://www.google.com.au",
R.drawable.thai,"thai" ,new Date(), 2, "abc@gmail.com");
        food3 = new Food("Chinese Cuisine", "https://www.google.com.au",
R.drawable.chinese,"chinese", new Date(), 2, "abc@gmail.com");
        food4 = new Food("Italian Cuisine", "https://www.google.com.au",
R.drawable.italian, "italian",new Date(), 2, "abc@gmail.com");
        setupView1(food1);
        setupView2(food2);
        setupView3(food3);
        setupView4(food4);
    }

    private void setupView1(Food food) {
        imgBtn1.setImageResource(food.getImageRef());
        txtCuisine1.setText("Name: " + food.getName());
//      txtCuisine1.setText(food.getDate());
        updateLabel(txtDate1, food.getDate());
    }

    private void setupView2(Food food) {
        imgBtn2.setImageResource(food.getImageRef());
```

```java
        txtCuisine2.setText("Name: " + food.getName());
        updateLabel(txtDate2, food.getDate());
    }

    private void setupView3(Food food) {
        imgBtn3.setImageResource(food.getImageRef());
        txtCuisine3.setText("Name: " + food.getName());
        updateLabel(txtDate3, food.getDate());
    }
    private void setupView4(Food food) {
        imgBtn4.setImageResource(food.getImageRef());
        txtCuisine4.setText("Name: " + food.getName());
        updateLabel(txtDate4, food.getDate());
    }

    public void clickFirstButton(View v) {
        Intent intent = new Intent(this, FoodActivity.class);
        intent.putExtra("food", food1 );
        startActivityForResult(intent, 1);
    }

    public void clickSecondButton(View v) {
        Intent intent = new Intent(this, FoodActivity.class);
        intent.putExtra("food", food2 );
        startActivityForResult(intent, 2);
    }

    public void clickThirdButton(View v) {
        Intent intent = new Intent(this, FoodActivity.class);
        intent.putExtra("food", food3);
        startActivityForResult(intent, 3);
    }

    public void clickFourthButton(View v) {
        Intent intent = new Intent(this, FoodActivity.class);
        intent.putExtra("food", food4 );
        startActivityForResult(intent, 4);
    }

    private void updateLabel(TextView txtDate,Date date) {
        String myFormat = "dd/MM/yy";
        SimpleDateFormat sdf = new SimpleDateFormat(myFormat, Locale.US);
        txtDate.setText(sdf.format(date));
    }

    @Override
    protected void onActivityResult(int requestCode, int resultCode, Intent data) {
        super.onActivityResult(requestCode, resultCode, data);
        if(resultCode == RESULT_OK) {
            Food food = data.getExtras().getParcelable("food_back");
            switch (requestCode) {
                case 1:
                    food1 = food;
                    setupView1(food);
                    break;
                case 2:
                    food2 = food;
                    setupView2(food);
                    break;
                case 3:
                    food3 = food;
```

```
                setupView3(food);
                break;
            case 4:
                food4 = food;
                setupView4(food);
                break;
            default:
                break;
        }
    }

    }

}
```

FoodActivity

```java
public class FoodActivity extends AppCompatActivity {

    ImageView imgDetail;
    EditText edtImageName;
    EditText edtLocation;
    EditText edtKeywords;
    EditText edtDate;
    EditText edtEmail;
    EditText edtRating;
    ToggleButton btnShare;
    Calendar myCalendar = Calendar.getInstance();
    Food food;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_detail_food);
        Bundle data = getIntent().getExtras();
        food = data.getParcelable("food");
        setupView(food);
    }

    private void setupView(Food food) {

        imgDetail = findViewById(R.id.imgDetail);
        edtImageName = findViewById(R.id.edtImageName);
        edtLocation = findViewById(R.id.edtLocationImage);
        edtKeywords = findViewById(R.id.edtKeywords);
        edtDate = findViewById(R.id.edtDate);
        edtEmail = findViewById(R.id.edtEmail);
        edtRating = findViewById(R.id.edtRating);
        btnShare = findViewById(R.id.btnShare);

        imgDetail.setImageResource(food.getImageRef());
        edtImageName.setText(food.getName());
        edtLocation.setText(food.getImageURL());
        edtKeywords.setText(food.getKeywords());
        edtEmail.setText(food.getOwners());
        btnShare.setChecked(food.isShareable());
        edtRating.setText(String.valueOf(food.getRating()));
        updateLabel(food.getDate());
```

```java
        final DatePickerDialog.OnDateSetListener date = new
DatePickerDialog.OnDateSetListener() {

            @Override
            public void onDateSet(DatePicker view, int year, int monthOfYear,
                                int dayOfMonth) {
                // TODO Auto-generated method stub
                myCalendar.set(Calendar.YEAR, year);
                myCalendar.set(Calendar.MONTH, monthOfYear);
                myCalendar.set(Calendar.DAY_OF_MONTH, dayOfMonth);
                updateLabel(myCalendar.getTime());
            }

        };

        edtDate.setOnClickListener(new View.OnClickListener() {

            @Override
            public void onClick(View v) {
                // TODO Auto-generated method stub
                new DatePickerDialog(FoodActivity.this, date, myCalendar
                        .get(Calendar.YEAR), myCalendar.get(Calendar.MONTH),
                        myCalendar.get(Calendar.DAY_OF_MONTH)).show();
            }
        });
    }

    private void updateLabel(Date date) {
        String myFormat = "dd/MM/yy";
        SimpleDateFormat sdf = new SimpleDateFormat(myFormat, Locale.US);
        edtDate.setText(sdf.format(date));
    }

    public void clickEditButton (View v) {
        food.setName(edtImageName.getText().toString());
        food.setImageURL(edtLocation.getText().toString());
        food.setRating(Integer.valueOf(edtRating.getText().toString()));
        food.setShareable(btnShare.isChecked());
        food.setKeywords(edtKeywords.getText().toString());
        food.setOwners(edtEmail.getText().toString());
        String dateString = edtDate.getText().toString();
        Date date= null;
        try {
            date = new SimpleDateFormat("dd/MM/yy").parse(dateString);
        } catch (ParseException e) {

        }
        food.setDate(date);

        Intent intent = new Intent();
        intent.putExtra("food_back", food);
        setResult(RESULT_OK, intent);
        finish();
    }
}
```