Software Development for Mobile Devices

# Submission for Assignment A5.2P

## Task Enhancing our favourite foods

### App Screen

|  |  |
| --- | --- |
| Activity | Screen |
| MainActivity | ../../../../../../../../Desktop/Screenshot_153 |
| FoodActivity | ../../../../../../../../Desktop/Screenshot_153 |

### Parcelable Object

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;  
 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  
 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.

### MainActivity

public class MainActivity extends AppCompatActivity {  
  
 ImageButton imgBtn1;  
 ImageButton imgBtn2;  
 ImageButton imgBtn3;  
 ImageButton imgBtn4;  
  
 TextView txtCuisine1;  
 TextView txtCuisine2;  
 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());  
 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

public class FoodActivity extends AppCompatActivity {  
  
 ImageView imgDetail;  
 EditText edtImageName;  
 EditText edtLocation;  
 EditText edtKeywords;  
 EditText edtDate;  
 EditText edtEmail;  
 RatingBar ratingBar;  
 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*);  
 ratingBar = findViewById(R.id.*ratingStar*);  
 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());  
 ratingBar.setRating(food.getRating());  
 updateLabel(food.getDate());  
  
  
 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((int) ratingBar.getRating());  
 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();  
 }  
}