



MANIPAL INSTITUTE OF TECHNOLOGY

(A constituent Institute of Manipal Academy of Higher Education)

MANIPAL - 576 104, KARNATAKA, INDIA

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PERCEPTIVE: AN ENTERTAINMENT RECOMMENDATION SYSTEMS

By

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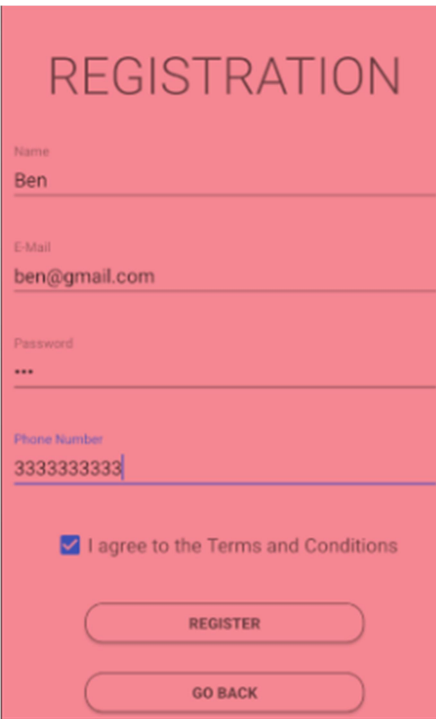
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Under the Guidance of

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Login and Register -

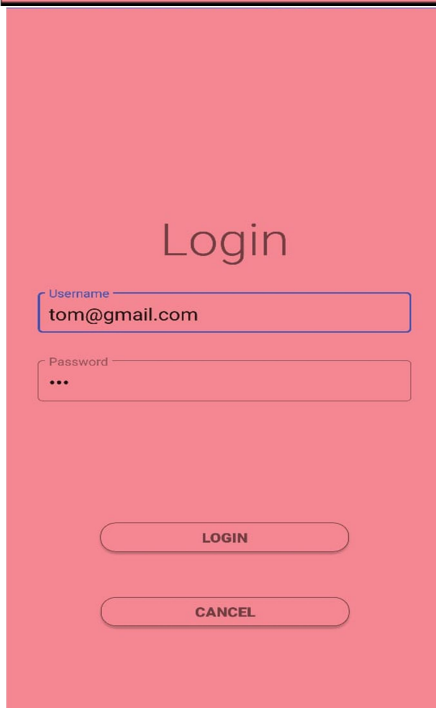


A registration form with a pink background. At the top, the word "REGISTRATION" is displayed in large, bold, black letters. Below it, there are four input fields: "Name" with the text "Ben", "E-Mail" with "ben@gmail.com", "Password" with three dots, and "Phone Number" with "3333333333". Below the phone number field is a checkbox labeled "I agree to the Terms and Conditions" which is checked. At the bottom, there are two rounded buttons: "REGISTER" and "GO BACK".

```
if ((name.matches( regex: "[a-zA-Z]+" )) && (phone.length() == 10) &&
    (name.length() != 0) && (email.length() != 0) && (password.length() != 0)) {
    user a = new user( String.valueOf( user.count++ ), name, email, password, phone );
    TinyDB tinydb = new TinyDB( appContext: this );
    ArrayList<Object> userdata = tinydb.getListObject( key: "userdata", user.class );
    userdata.add( (Object) a );
    tinydb.putListObject( key: "userdata", userdata );

    Intent i = new Intent( packageContext: this, loginActivity.class );
    startActivity( i );
}
```

This enters the registration details into the database.



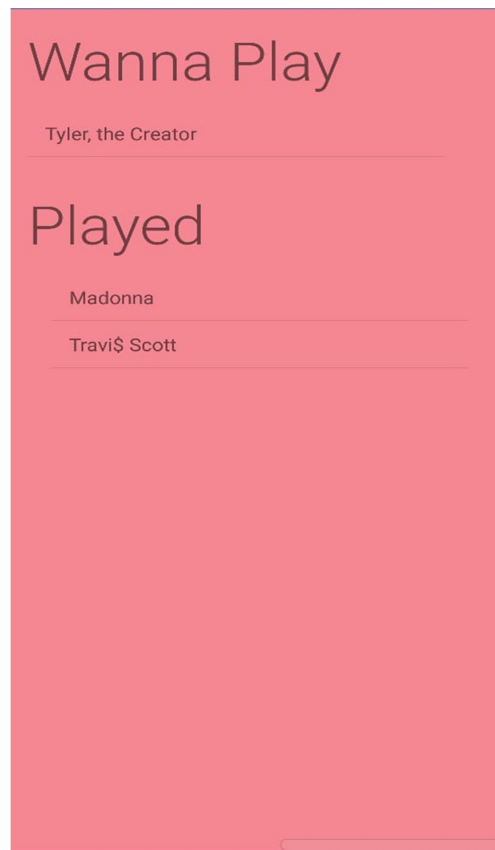
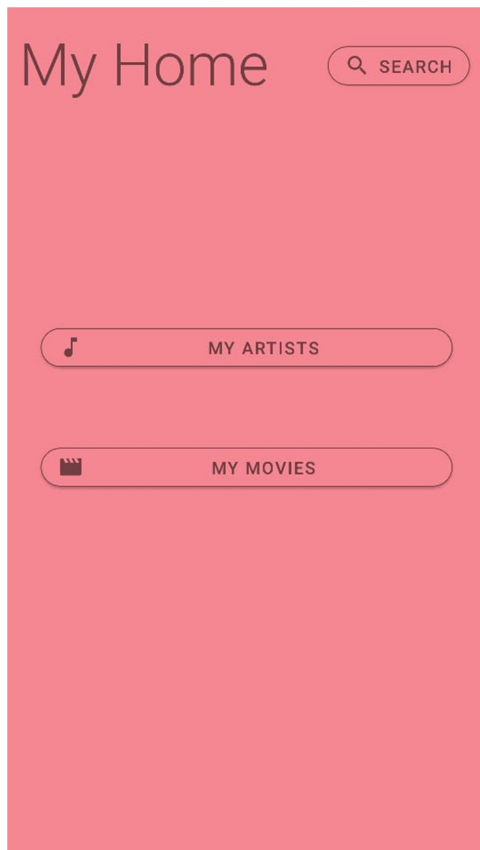
A login form with a pink background. At the top, the word "Login" is displayed in large, bold, black letters. Below it, there are two input fields: "Username" with the text "tom@gmail.com" and "Password" with three dots. At the bottom, there are two rounded buttons: "LOGIN" and "CANCEL".

```
TinyDB tinydb = new TinyDB( appContext: this );
ArrayList<Object> userdata = tinydb.getListObject( key: "userdata", user.class );

for( Object objs : userdata ) {
    user temp = (user) objs;
    if ( (temp.email.equals( enteredUsername )) && (temp.password.equals( enteredPassword )) ) {
        userid = temp.id;
        flag = 1;
        Intent i = new Intent( packageContext: this, homePageActivity.class );
        startActivity( i );
    }
}

if ( flag == 0 ) {
    etu.setText( "" );
    etp.setText( "" );
    etp.setError( "Invalid Credentials" );
    etu.setError( "Invalid Credentials" );
}
```

This validates the login credentials entered with the database.



Homepage and Favorites-

```
try {
    Log.d( tag: "aaa", msg: "Starting...");
    artist_str = artist_str.trim();
    artist_str = artist_str.replace( target: " ", replacement: "%20");
    artist_str = artist_str.replace( target: "&", replacement: "and");
    String lastfm = "http://ws.audioscrobbler.com/2.0/?method=artist.getinfo&artist="+artist_str+"&api_key="+api_key+"&format=json";
    URL urlForGetRequest = new URL(lastfm);
    String readLine = null;
    HttpURLConnection conection = (HttpURLConnection) urlForGetRequest.openConnection();
    int responseCode = conection.getResponseCode();
    if (responseCode == HttpURLConnection.HTTP_OK) {
        BufferedReader in = new BufferedReader(
            new InputStreamReader(conection.getInputStream()));
        StringBuffer response = new StringBuffer();

        while ((readLine = in.readLine()) != null) {
            response.append(readLine);
            data = data + readLine;
        } in.close();

        JSONObject myResponse = new JSONObject(response.toString());
        JSONObject myResponse1 = new JSONObject(myResponse.get("artist").toString());
        a1.name = myResponse1.get("name").toString();
        JSONArray imagesArray = (JSONArray) myResponse1.get("image");
        JSONObject image = (JSONObject) imagesArray.get(2);
        a1.image_url = image.get("#text").toString();
        JSONObject bioResponse = new JSONObject(myResponse1.get("bio").toString());
        a1.summary = bioResponse.get("summary").toString();
        JSONObject statResponse = new JSONObject(myResponse1.get("stats").toString());
        a1.listeners = statResponse.get("listeners").toString();
    }
}
```

This fetches artist's name, description, listeners/ratings and their image.

Search page -

Search

Enter Your Favourite

Kanye West

ARTISTS

SEARCH

Pusha T

Kid Cudi

Jay-Z & Kanye West

Travi\$ Scott

Kendrick Lamar

The Throne

Tyler, the Creator

A\$AP Rocky

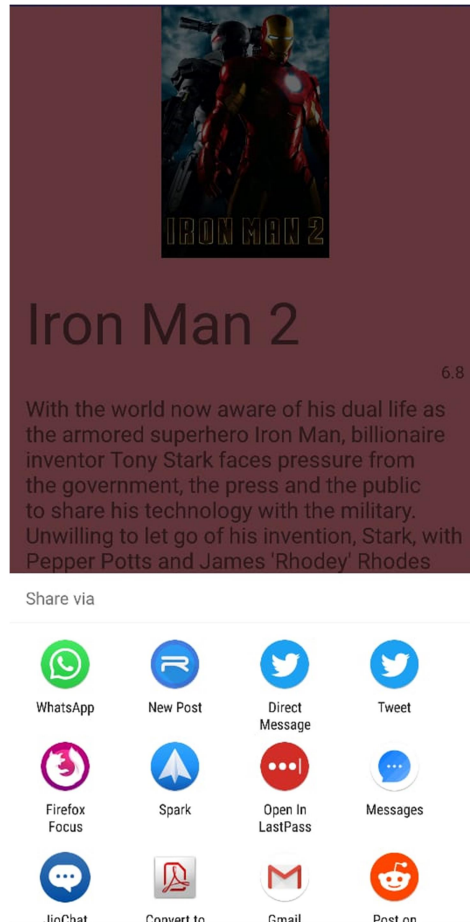
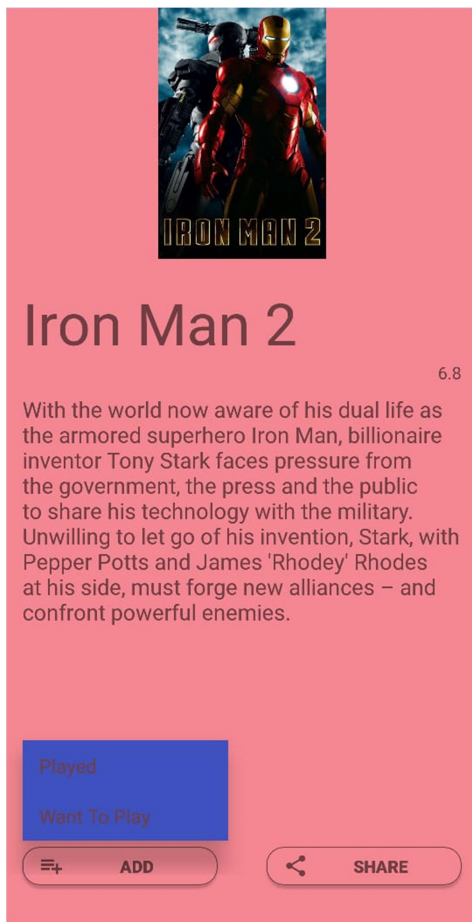
Earl Sweatshirt

Chance the Rapper

```
try {  
  
    String lastfml = "http://ws.audioscrobbler.com/2.0/?method=artist.getsimilar&artist=";  
    String lastfm2 = "&limit=10&api_key=d4d8ce6b7f878903fd54602d00a66f0d&format=json";  
    topic = topic.trim();  
    topic = topic.replace( target: " ", replacement: "%20");  
    topic = topic.replace( target: "&", replacement: "and");  
    String lastfm = lastfml + topic + lastfm2;  
  
    URL urlForGetRequest = new URL(lastfm);  
    String readLine = null;  
    HttpURLConnection conection = (HttpURLConnection) urlForGetRequest.openConnection();  
    int responseCode = conection.getResponseCode();  
    if (responseCode == HttpURLConnection.HTTP_OK) {  
        BufferedReader in = new BufferedReader(  
            new InputStreamReader(conection.getInputStream()));  
        StringBuffer response = new StringBuffer();  
  
        while ((readLine = in.readLine()) != null) {  
            response.append(readLine);  
            data = data + readLine;  
        } in.close();  
        JSONObject myResponse = new JSONObject(response.toString());  
        JSONObject myResponse1 = new JSONObject(myResponse.get("similarartists").toString());  
        JSONArray artistsArray = (JSONArray) myResponse1.get("artist");  
        for (int i = 0; i<artistsArray.length(); i++){  
            JSONObject artist = (JSONObject) artistsArray.get(i);  
            arr[i] = artist.get("name").toString();  
        }  
    }  
}
```

This provides us with similar artists or movies based on the search.

Results and share page-



```
final SpeechRecognizer speechRecognizer = SpeechRecognizer.createSpeechRecognizer(this);
final Intent speechRecognizerIntent = new Intent(RecognizerIntent.ACTION_RECOGNIZE_SPEECH);
speechRecognizerIntent.putExtra(RecognizerIntent.EXTRA_LANGUAGE_MODEL,
    RecognizerIntent.LANGUAGE_MODEL_FREE_FORM);
speechRecognizerIntent.putExtra(RecognizerIntent.EXTRA_LANGUAGE,
    Locale.getDefault());
speechRecognizer.setRecognitionListener(new RecognitionListener() {
    @Override
    public void onResults(Bundle results) {
        ArrayList<String> matches = results.getStringArrayList(SpeechRecognizer.RESULTS_RECOGNITION);
        //displaying the first match
        if (matches != null)
            search_topic.setText(matches.get(0));
    }
});
```

This activates voice search functionality.

```
search_lv.setOnItemClickListener((parent, view, position, id) → {
    if (type == 1){
        fetch_details_artists fda = null;
        fda = new fetch_details_artists(arr[position]);
        fda.execute();
        try {
            Thread.sleep( millis: 2000);
        } catch (InterruptedException e) {
            e.printStackTrace();
        }
        Intent i = new Intent( packageContext: searchActivity.this, DetailsActivity.class);
        i.putExtra( name: "Name", a1.name);
        i.putExtra( name: "Desc", a1.summary);
        i.putExtra( name: "Extra", a1.listeners);
        i.putExtra( name: "Img", a1.image_url);
        i.putExtra( name: "Mode", value: "1");
    }
}
```

This calls the API for searching and sets the data.

```
public void putListObject(String key, ArrayList<Object> obj) {
    checkForNullKey(key);
    Gson gson = new Gson();
    ArrayList<String> objStrings = new ArrayList<>();
    for(Object obj : objArray){
        objStrings.add(gson.toJson(obj));
    }
    putListString(key, objStrings);
}
```

This uses shared preferences to store the list object.

