CSIS 3175 – Section 001

Introduction to Mobile App Development

Project Report

Group 2

App Name: Punch My Time

Bengisu Gelin

Description: Punch My Time is a tracker application focusing on part-time/temporary / on-call types of jobs. In our case worker is working with multiple employees on a contract based without a distinct schedule.

Contents

1. App Name and Description

App Name: Punch My Time

Description: Punch My Time is a tracker application focusing on part-time/temporary / on-call types of jobs. In our case worker is working with multiple employees on a contract based without a distinct schedule.

2. Motivation of the App

Motivation of this app is helping people who don’t have a distinct schedule. Especially student who work part-time or working in more than one place having hard time to keep track of their earnings. This app can assist them to manage their work hours, and track their earnings.

3. Technical concepts implemented

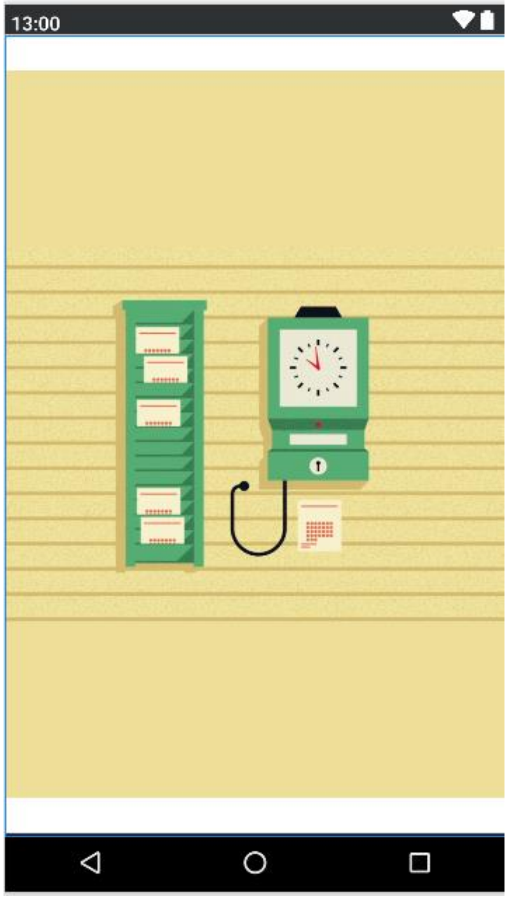
- Splash Activity (GIF)
- Takes User input to log in, get company information and get punch information, as well as user profile information.
- Spinner (to show companies added by the user, linked to db)
- Recycler view (to show the summary of punches)
- Some Calculations (computing total earnings, and total working hours with data from DB)

4. Technical Extensions

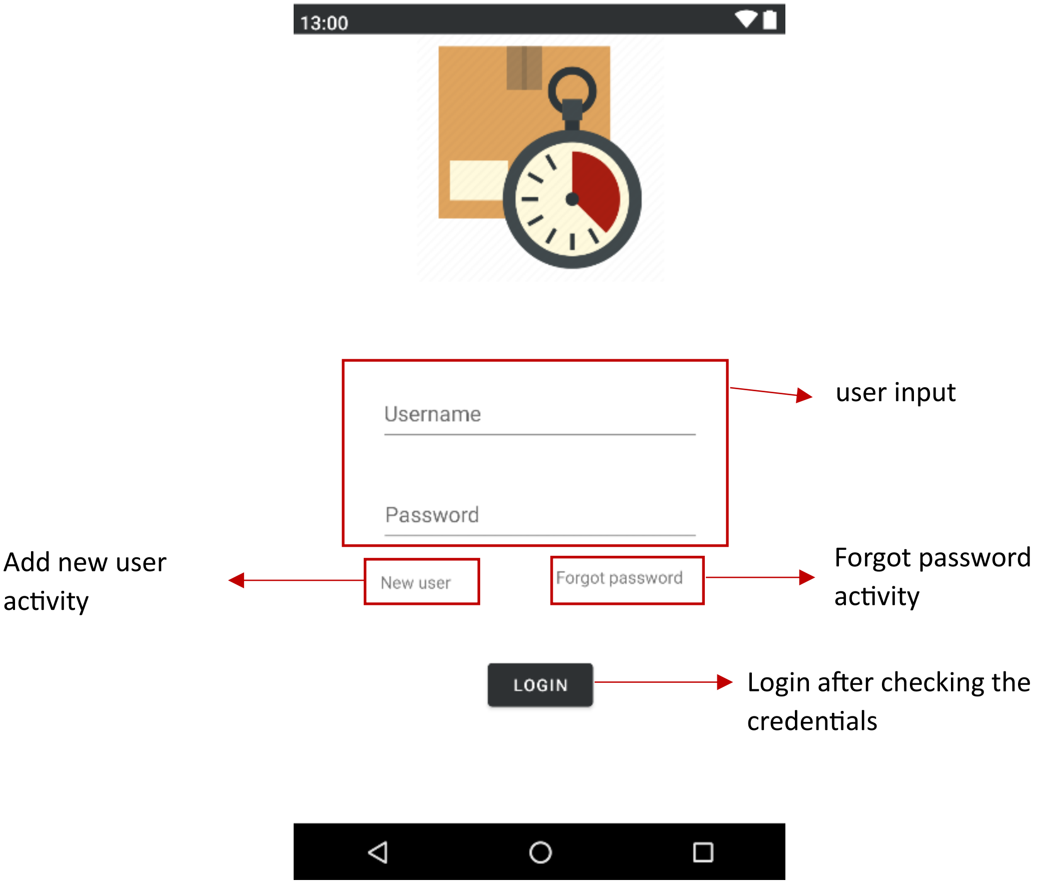
- Navigation drawer
- Time Picker, Data Picker
- Recycler view swipe left to delete.
- Alert dialog before deletion
- Database & CRUD operations with SQLiteOpenHelper
- Pie Chart (not added to the app)
- Mail sender for forgot password activity (not added to the app)

5. Screenshots of every screen

5.1. Splash Activity

Member Name	Work
Bengisu Gelin	Splash Activity using GIF image
Work Description	
In order to have GIF image right after opening the app, splash activity has been selected as first activity, then connected to the login page. To be able to use GIF image, implementation was added to the gradle.	
Related Layouts & java classes	
SplashActivity (Java)	activity_splash (layout)
drawable (punch.gif)	-Intent to main activity
Visual Explanations of the work	
	

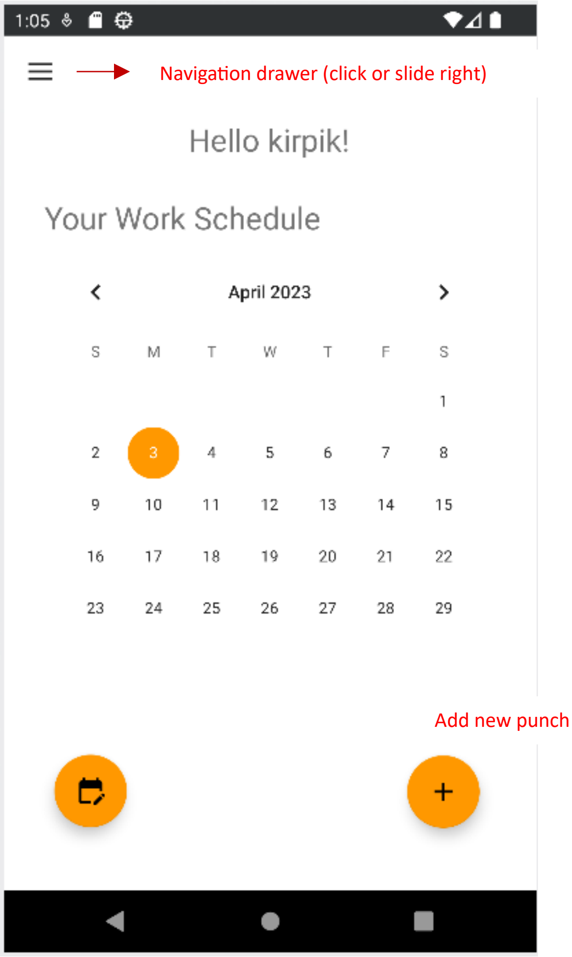
5.2. User Login Activity

<table>
<tr><th>Member Name</th><th>Work</th></tr>
<tr><td>Bengisu Gelin</td><td>Main Activity (User Login)</td></tr>
<tr><th colspan="2">Work Description</th></tr>
<tr><td colspan="2">User login activity Layout was created. User inputs were linked to the database in order to check if the username and password is matches, if yes, login to the app when clicked Login button. New user and forgot password texts were made clickable so that user can connect to different activities.</td></tr>
<tr><th colspan="2">Related Layouts & java classes</th></tr>
<tr><td>MainActivity(Java)</td><td>Activity_main(layout)</td></tr>
<tr><td>DatabaseHelper(Java)</td><td>Intent to home, new user and forgot password activities</td></tr>
<tr><th colspan="2">Visual Explanations of the work</th></tr>
<tr><td colspan="2">


</td></tr>
</table>

5.3. Home Page Activity

Member Name	**Work**
Bengisu Gelin	Home Page
Work Description	
Home page of the app. Welcomes the user and gives options on what to do. If the user wanted to add a new hour, they can click on the floating button located in the bottom right corner of the app. The User can reach the navigation bar for more options.	
Related Layouts & java classes	
HomePageActivity(Java)	Activity_home_page(layout)
NavigationBar	Intent to add new punch
drawable	
Visual Explanations of the work	



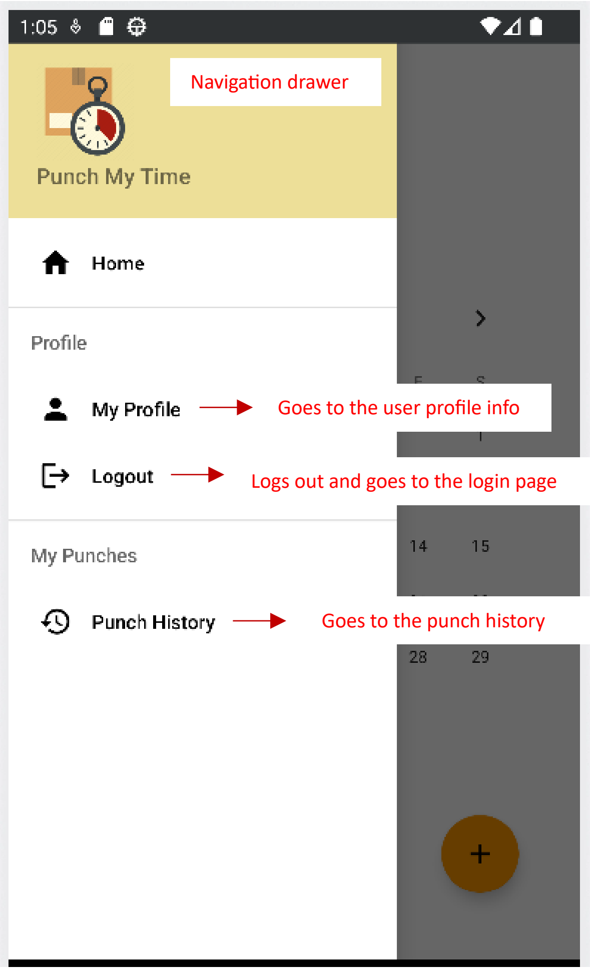
Hello kirpik!

Your Work Schedule

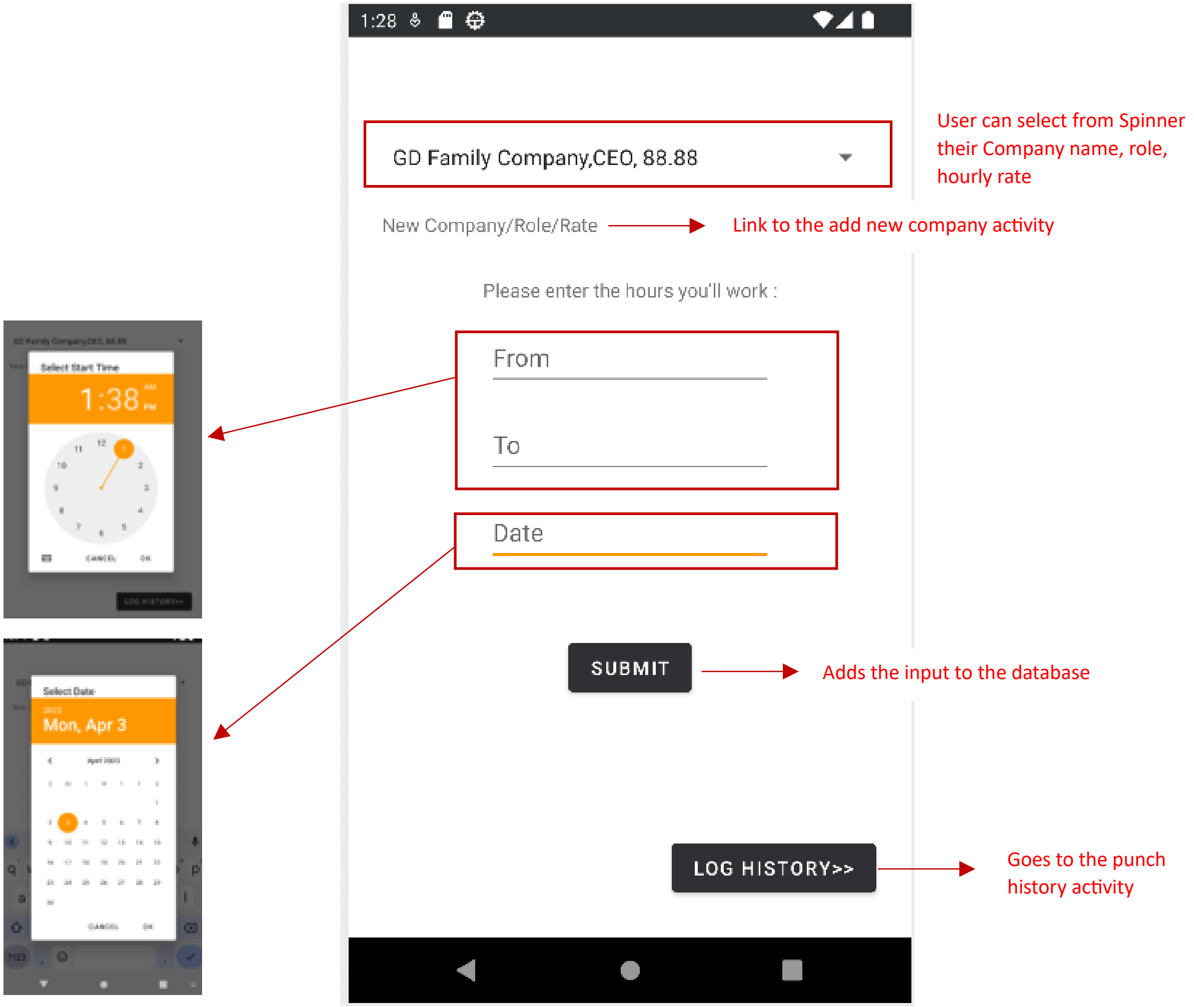
April 2023

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29

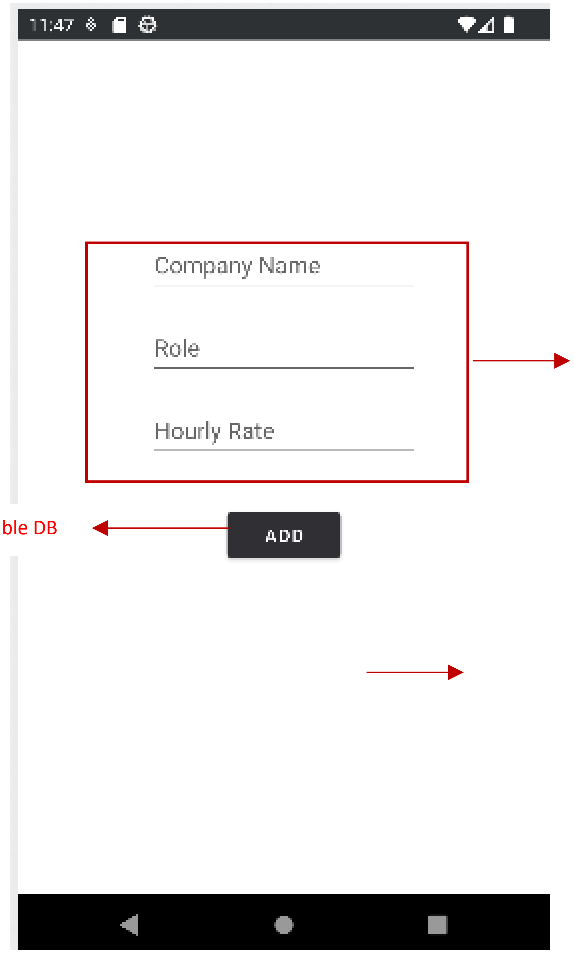
5.4. Navigation Drawer

Member Name	Work
Bengisu Gelin	Navigation Drawer
Work Description	
In the navigation drawer, 3 different groups were created namely, Home, Profile, and My Punches groups. Profile group has two items: My Profile and Logout. When the user clicked on My Profile, they will be directed to the user profile activity. When logout is clicked on, the app will return to the login page. In the My Punches group, if the user clicked on the punch history item, they will go to the punch history activities. In order to create this feature, a menu layout, and navigation header layout were created. Then they were merged into the activity home page through the home page activity java class.	
Related Layouts & java classes	
nav_drawer_menu (Menu)	nav_header (layout)
HomePageActivity(Java)	Activity_home_page(layout)
drawable	Intent to user profile, user login, and punch history activities
Visual Explanations of the work	
 1:05 Punch My Time Home Profile My Profile Logout My Punches Punch History 14 15 28 29 + Navigation drawer Goes to the user profile info Logs out and goes to the login page Goes to the punch history	

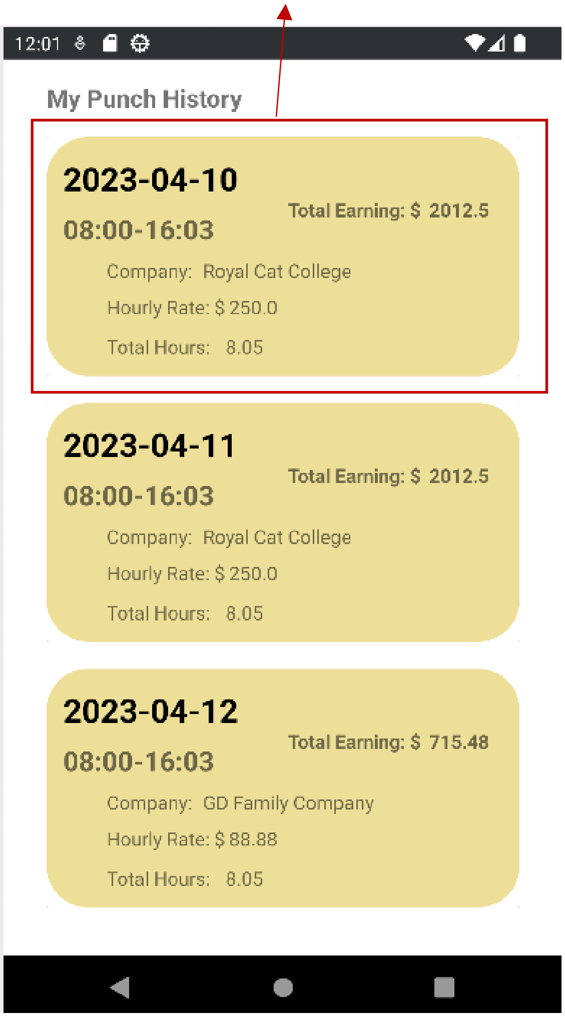
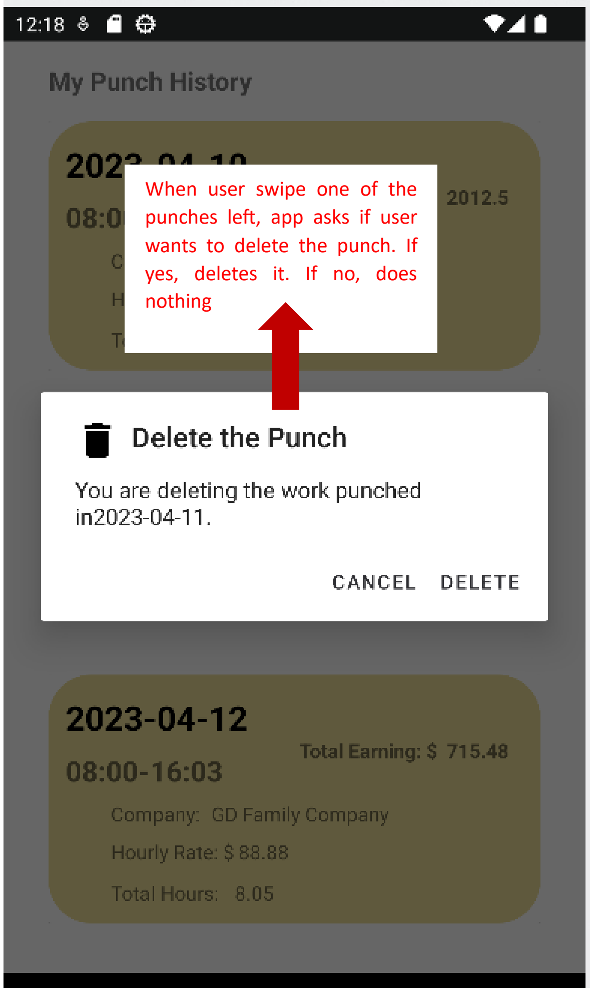
5.5. New Working Hours Activity

Member Name	**Work**
Bengisu Gelin	New Working Hours
Work Description	
As a first step, the user can choose the company for punching the time they worked. If the company is not entered, then the user can go to the add new company activity to add their new company by clicking the New Company/Role/Rate text. After choosing the company, they can enter the beginning & end hours and date of their work using timepicker and datepicker features. When the user clicked submit, punch will be written to the database. User also can go to the log history page to see their historical data and/or delete it.	
Related Layouts & java classes	
NewWorkingHours(Java)	Activity_new_working_hours(layout)
DatabaseHelper(Java)	Intent to add new company, log history activities.
Visual Explanations of the work	
 GD Family Company,CEO, 88.88 User can select from Spinner their Company name, role, hourly rate New Company/Role/Rate Link to the add new company activity Please enter the hours you'll work : From To Date Select Start Time 1:38 Select Date 2023 Mon, Apr 3 SUBMIT Adds the input to the database LOG HISTORY>> Goes to the punch history activity	

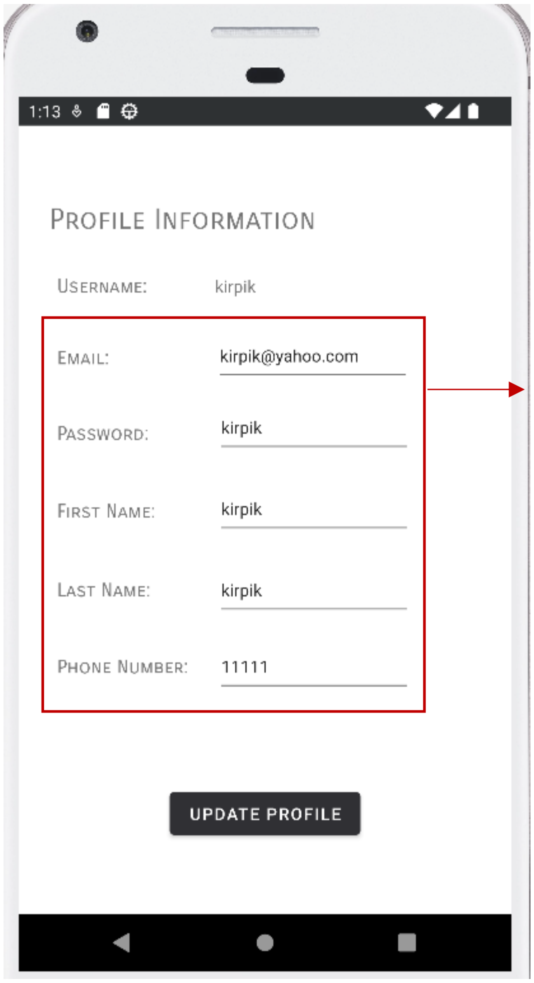
5.6. Add New company / Role/ hourly rate activity

Member Name	**Work**
Bengisu Gelin	NewCompanyRoleRate
Work Description	
Allow the user to enter the Company name, role, and hourly rate information to use it while the user wanted to add hours. This information will be added to the database when the user clicks add button, as well as to the spinner in the new working hours activity.	
Related Layouts & java classes	
NewCompanyRoleRate(Java)	activity_new_company_role_rate (layout)
DatabaseHelper(Java)	Intent to new working hours
CompanyModel(java)	
Visual Explanations of the work	
 Input values given by the user Adds inputs to the company table DB	

5.7. Punch History Activity

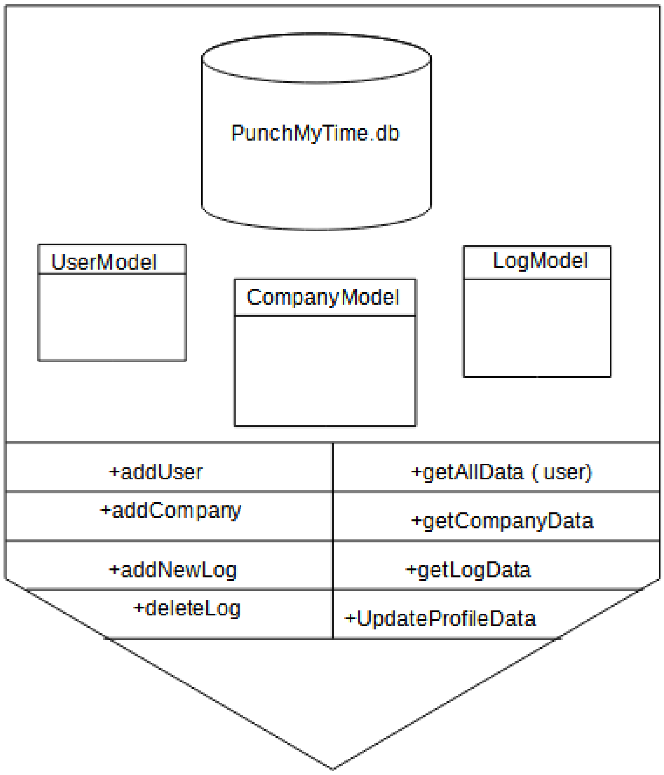
Member Name	Work
Bengisu Gelin	Punch History
Work Description	
The main purpose of punch history is to show the punched work history to the user. To do it, the Date, start – end hours, company name, and hourly rate info are obtained from the database. Then, total hours and Total earnings were calculated. As a second feature, when the user swipes to left, the app will pop up an alert dialog to ask the user if they wanted to delete the swiped punch, if yes, it will be deleted from the UI as well as the database.	
Related Layouts & java classes	
PunchLogsActivity (java)	Activity_punch_logs_activity (layout)
DatabaseHelper(Java)	CustomAdapter (java)
LogModel (java)	Log_recylerview(layout)
Visual Explanations of the Work	
Recycler view shows the summary of every punch. All data are being pulled from DB  12:01 My Punch History 2023-04-10 Total Earning: $ 2012.5 08:00-16:03 Company: Royal Cat College Hourly Rate: $ 250.0 Total Hours: 8.05 2023-04-11 Total Earning: $ 2012.5 08:00-16:03 Company: Royal Cat College Hourly Rate: $ 250.0 Total Hours: 8.05 2023-04-12 Total Earning: $ 715.48 08:00-16:03 Company: GD Family Company Hourly Rate: $ 88.88 Total Hours: 8.05	 When user swipe one of the punches left, app asks if user wants to delete the punch. If yes, deletes it. If no, does nothing 12:18 My Punch History 2012.5 Delete the Punch You are deleting the work punched in2023-04-11. CANCEL DELETE 2023-04-12 Total Earning: $ 715.48 08:00-16:03 Company: GD Family Company Hourly Rate: $ 88.88 Total Hours: 8.05

5.8. Profile Info Activity

<table>
<tr><th>Member Name</th><th>Work</th></tr>
<tr><td>Bengisu Gelin</td><td>See and update profile info</td></tr>
<tr><td colspan="2"><b>Work Description</b></td></tr>
<tr><td colspan="2">The page retrieves the data that the user entered when they signed up to the app, through new user activity. On this page, information added in the new user activity will be read from the database to show the user their info, as well as allow them to change it if they need to update their information.</td></tr>
<tr><td colspan="2"><b>Related Layouts & java classes</b></td></tr>
<tr><td>ProfileInfoActivity (java)</td><td>Activity_profile_info(layput)</td></tr>
<tr><td>DatabaseHelper(Java)</td><td>UserModel(java)</td></tr>
<tr><td></td><td></td></tr>
<tr><td colspan="2"><b>Visual Explanations of the work</b></td></tr>
<tr><td colspan="2">
1:13
PROFILE INFORMATION
USERNAME: kirpik
EMAIL: kirpik@yahoo.com
PASSWORD: kirpik
FIRST NAME: kirpik
LAST NAME: kirpik
PHONE NUMBER: 11111

Profile information coming from Database. If user wants to change any of their info (username excluded), they can change it and when they clicked update button, it will be changed in database.</td></tr>
</table>

5.9. Database Implementation

<table>
<tr><th>Member Name</th><th>Work</th></tr>
<tr><td>Bengisu Gelin</td><td>Database</td></tr>
<tr><th colspan="2">Work Description</th></tr>
<tr><td colspan="2">In order to create the database, Database helper class was created. In this class, all the database-related methods were implemented. First, punchmytime.db was created. Then, inside this database, 3 tables were designed as My_punchtime_user table, my_punchtime_company table and my_punchtime_logs table.
Using SQLite commands, all tables were created. Meanwhile, for these tables, three different classes, userModel, CompanyModel and LogModel were also created. After this, CRUD operations were implemented in the database helper class. Adding a new user, new company, and new log methods; reading the user table, company table, and log table method, deleting log table methods, update the user profile method were created.</td></tr>
<tr><th colspan="2">Related Layouts & java classes</th></tr>
<tr><td>DatabaseHelper(Java)</td><td>UserModel, CompanyModel,LogModel(java)</td></tr>
<tr><td>HomePage Activity</td><td>Main Activity</td></tr>
<tr><td>New Company role Rate Activity</td><td>New user register activity</td></tr>
<tr><td>New working hours activity</td><td>Profile info activity</td></tr>
<tr><td>Punch logs activity</td><td></td></tr>
<tr><th colspan="2">Visual Explanations of the work</th></tr>
<tr><td colspan="2">
</td></tr>
</table>