

Ali Hasanzadeh

Android Developer

Iran

Email:

alimohammad.hasanzadeh1986@gmail.com

Mobile:

+989129532272

Expertise:

- **Streaming:** Android MediaCodec: Decode and encode streams such as H264, MJPEG Customized streamer (including implementation of buffer (stabilizing framerate) and frame-dropper), DRM, adaptive streaming (DASH, ExoPlayer), ExoPlayer, MediaPlayer.
- **Location:** Location (GPS/map) based development, Google Maps API.
- **Security:** Proguard, Google SafetyNet (SafetyNet Attestation API, SafetyNet Verify Apps API), Play Integrity API (Genuine app binary, Genuine Play install, Genuine Android device), Android cryptography built-in tools such as Cipher, KeyStore, KeyAgreement, OWASP MASVS.
- **Design:** Android Material library, “Material You” library (Android 12), Jetpack Compose, Lottie Animation, Android Palette library, Adobe XD & Figma files, Interested in creative UI design.
- **Charts and Statistics:** MPAndroidChart Library, Making and animating custom graphs using Android Shapes + Animator.
- **Android Built-In Sensors:** Sensors such as Accelerometer, Gravity Field, Proximity, Rotation Vector, Tracking user activities such as standing still, walking, bicycling, running, being in a vehicle, sleeping,
- **Other:** Android data persistency (SQLite, ORMs such as GreenDAO), Room, Firebase database, Firebase Cloud Messaging, Firebase Vision (Object Recognition), RxJava, Retrofit, AIDL, JSON Android Libraries (Jackson, Gson, Moshi), MPAndroidChart Library, Android Architecture Patterns (MVP, MVVM), Kotlin Coroutines, Flow, Dagger, Hilt, Android CI/CD, Unit Testing, Mockito, Espresso, Robolectric, Test Driven Development (TDD), Firebase Test Lab, Android Auto, RESTful API, Postman, Android BLE Library, Sentry, Firebase Analytics, Gitflow, Flavors.

WORK EXPERIENCE

Senior Android Developer

Kaman (*Mobinnet Contactor*)

- Jan.
2021 -
Current
- (Scrum) Sole-developed and co-designed thoroughly, and took ownership of “*Mobinio*” Android application for Mobinnet, Arcadian application for *Arcadian.ai* which has the same owner as Kaman and Abricam application for Kaman which is a variant of Mobinio. The app functionality is streaming surveillance cameras on Android devices using Android low-level MediaCodec to decode multiple H264 streams, and custom module to show MJPEG online stream in addition to implementation of frame dropper. Implementing key agreement in first version with server-based authorization using ECDH key agreement protocol. It acts as a file manager for videos and photos saved on the cloud storage and allows user to view, share, delete, add note and download them. (Published on Mobinnet -major telecommunication company in Iran- website: [link](#) and soon in Play Store)

Freelancing and various projects

Infaction's Recruiter's Shelf: Application which shows the statistics of job market with different graphs and charts such as pie chart, bar chart, ... (Please refer to my portfolio below).

CCTVDroid (60k+ downloads in Play Store): This app streams video and audio between two android devices and turns one Android device into CCTV camera and another to monitor. It establishes a peer-to-peer connection between the two android devices omitting server role for transferring video and audio, using Google WebRTC. The app also matches phone with a Telegram ID, on which the user can send commands such as record video and capture photo to the now-CCTV-camera Android device and receive them through Telegram bot (PHP Backend).

Nazdiktarin Dastshuii: Shows nearest private and public restrooms in Iran, on map. User can get extra information and navigation by clicking on the map.

Kittyapp: An app designed for cat pets. Games, videos, music and pranks in different fragments of the application. It has Android Auto support, as well.

The rest are in my portfolio, below.

CERTIFICATES

2014 **High Performance and Grid Computing (Parallel computing with C & Fortran)** [IPM](#) (Institute for Research in Fundamental Sciences)

ALL COMPUTER SKILLS

- Java (Android), Kotlin
- PHP, MySQLi
- Python (Numpy, Pandas, SciPy, Statsmodels, Scikit-learn, Keras, Beautiful Soup, Selenium)
- Git, Jira, Confluence
- C, Fortran, QBasic, HTML, CSS (Basic)
- Gnuplot, Photoshop, 3dMax, MATLAB, Maple
- Linux, Raspberry Pi, Arduino

EDUCATION

2013 - 2015

[**Amirkabir University of Technology**](#)

Computational Physics, MSc (Ranked 50th nationwide in national university entrance exam for Master's Degree) Tehran

- MSc Thesis: Investigation of Ion Stability in a Spherical Ion Trap, Using Runge–Kutta numerical method and FORTRAN, MATLAB & Gnuplot to calculate and visualize electric field fluctuations and particle trajectory and stability in trap), Under supervision of Dr.H. Noshad
- Investigation and simulation of crystal Structure of Diamond, Methane and Silicone using ABINIT & Xcrysden (lattice constant, band gap, ngkpt, cut-off energy). Under supervision of Dr. F. Marsusi
- Investigation and practical C, Fortran computational coding for Distributed (normal, linear, ...) Random Number Generation Methods such as Ziggurat Algorithm; and Monte Carlo Method
- Simulation and Visualization of Ising Model using random number generation and Monte Carlo method by Fortran and Gnuplot, Under supervision of Dr. A. Jafari

2004 - 2008

[**Isfahan University of Technology**](#)

Isfahan

Mechanical Engineering

LANGUAGES

- | | |
|-------------------|--------|
| • English | Fluent |
| • Persian (Farsi) | Native |

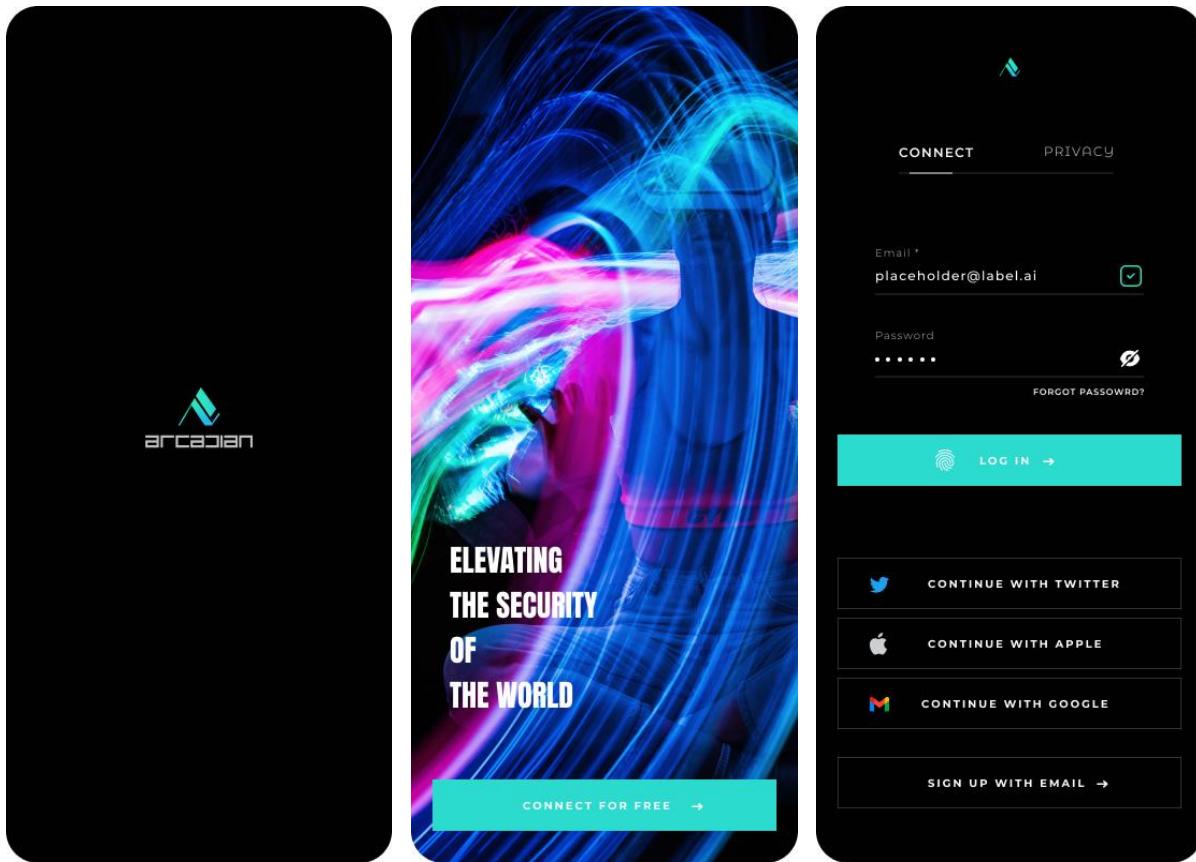
Portfolio:

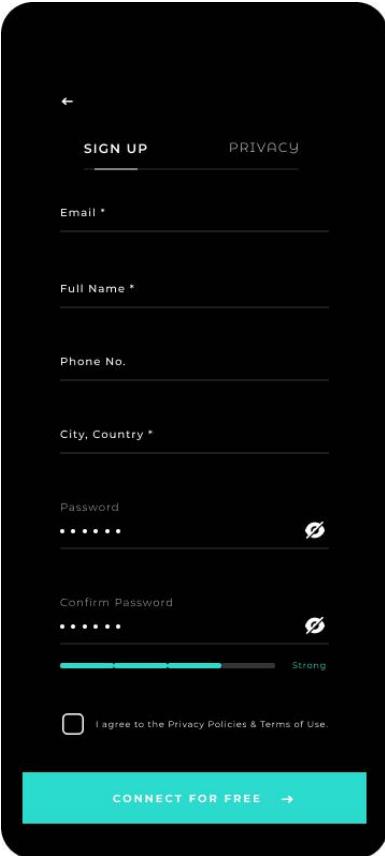
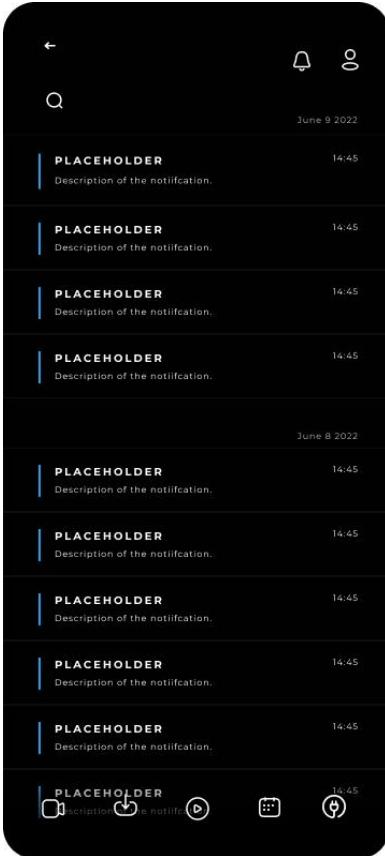
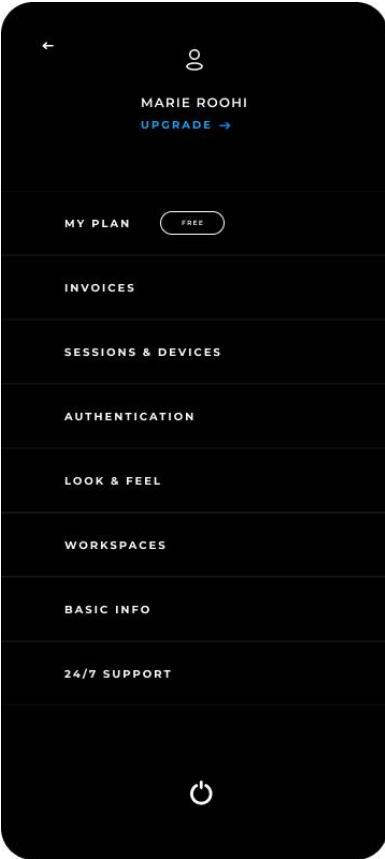
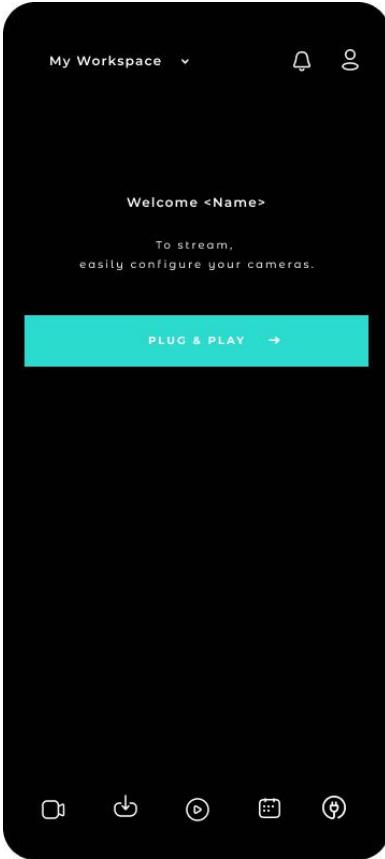
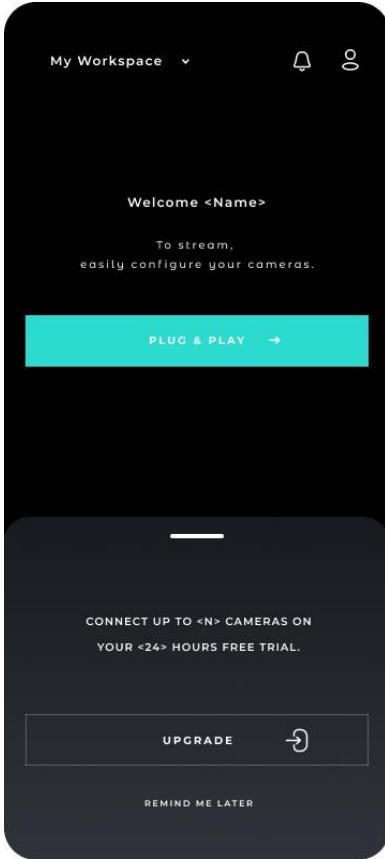
Videos (Google Drive)

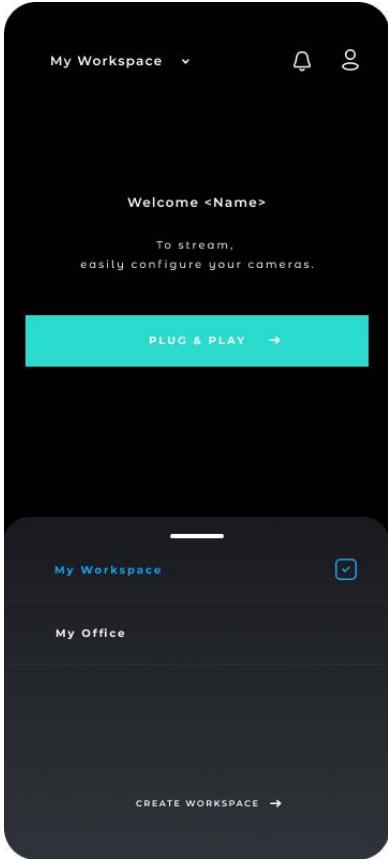
Arcadian: (Sole-Developer) *Work in Progress*, for Arcadian.ai (Has the same product owner and functionality as Mobinio. Just that Arcadian will be launched in Canada and Mobinio was launched in Iran.)

It streams H.264 and MJPEG streams, gets snapshots of videos, plays back past videos from cloud, has a file manager for snapshots and saved videos on cloud.

Syntax: *Kotlin/Jetpack Compose*







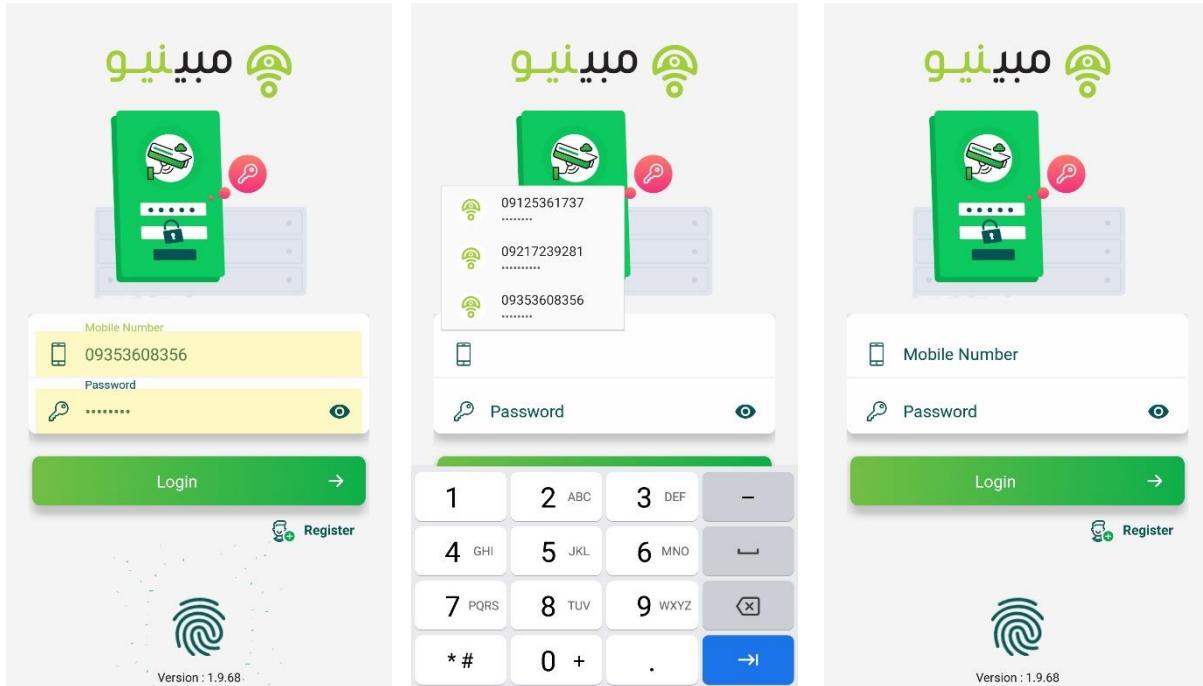
Mobinio: (Co-Designer and Sole-Developer) (*CCTV cameras streaming (and save on cloud) (VAAS) for Kaman Company*)

Version 2:

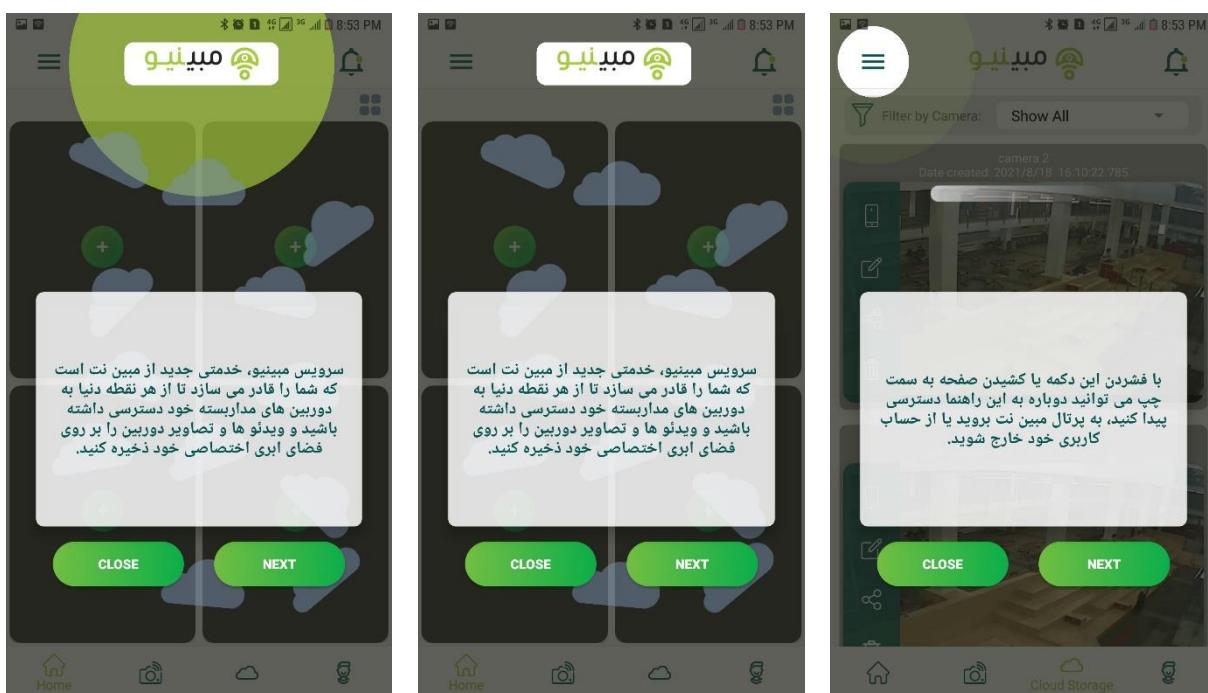
Videos (Google Drive)

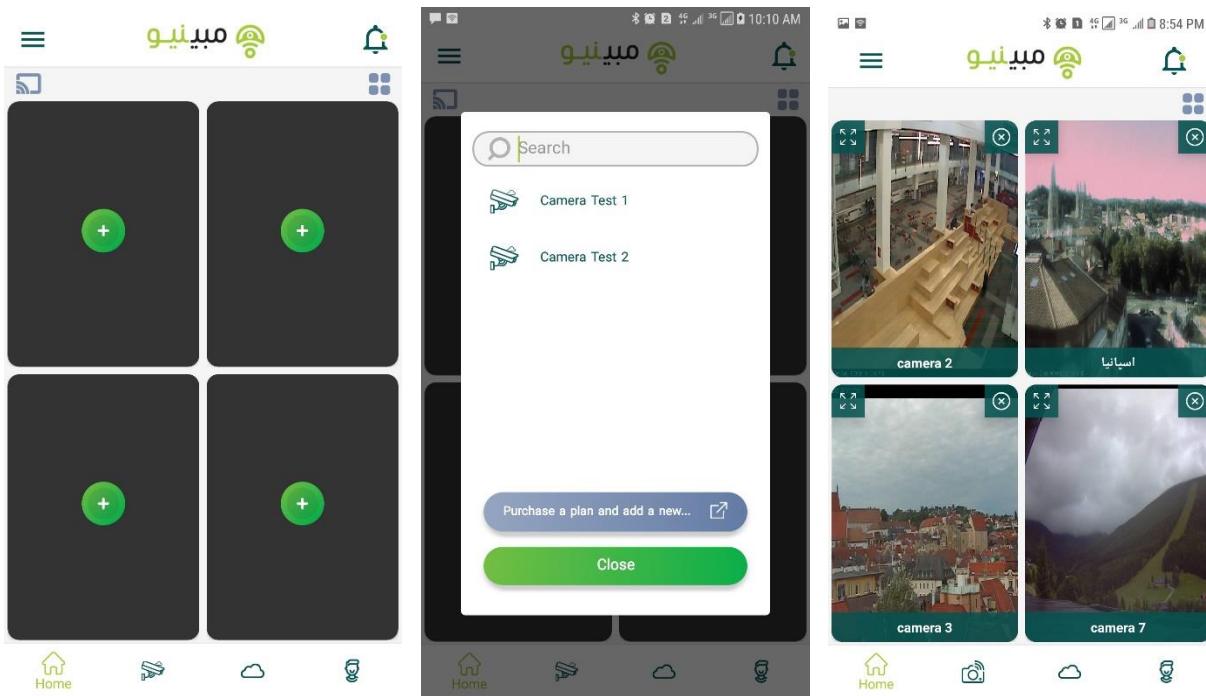
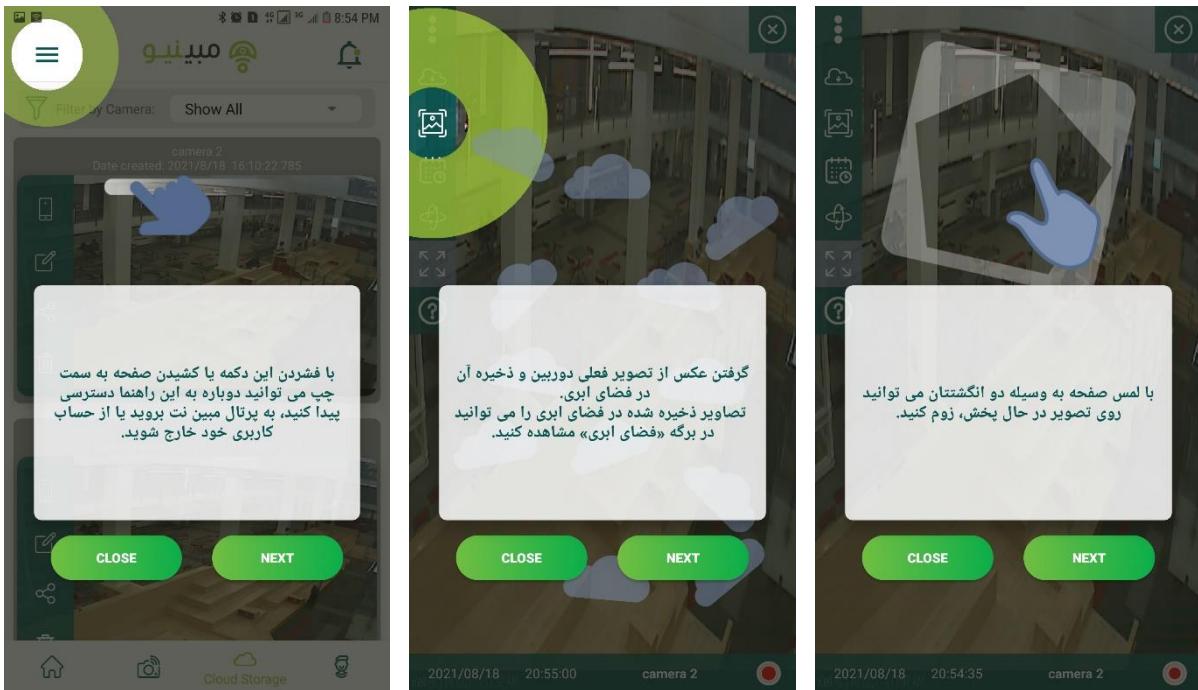
Snapshots:

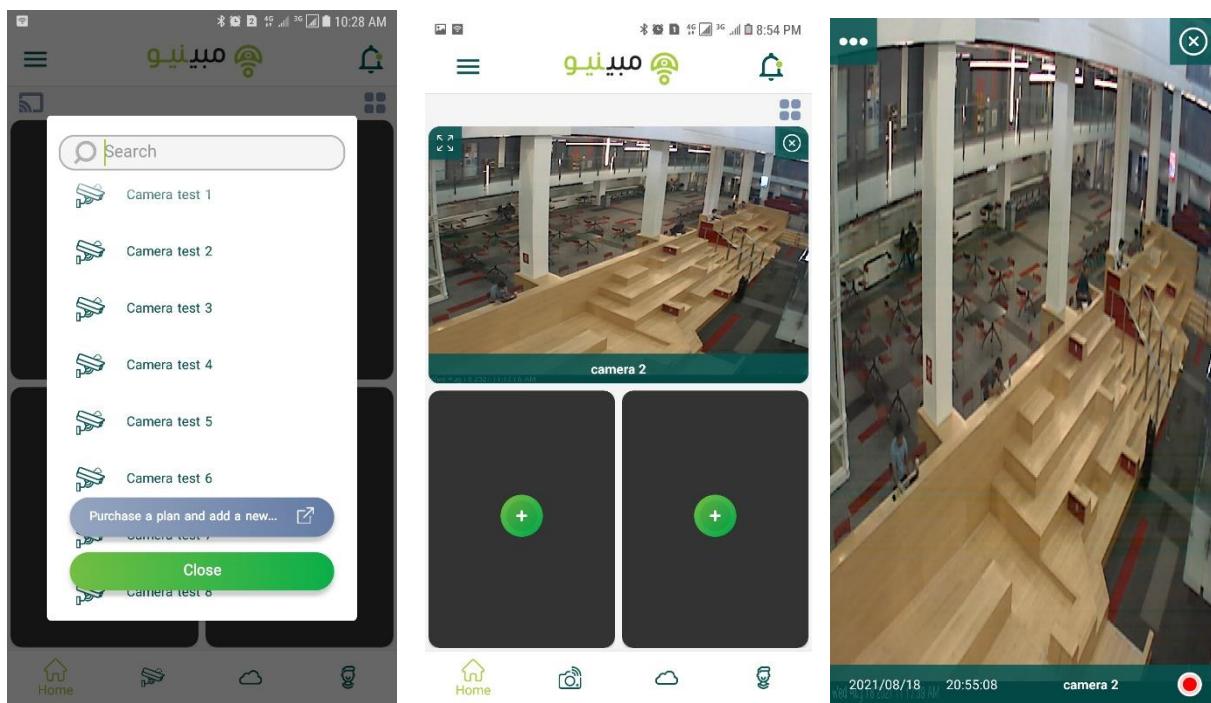
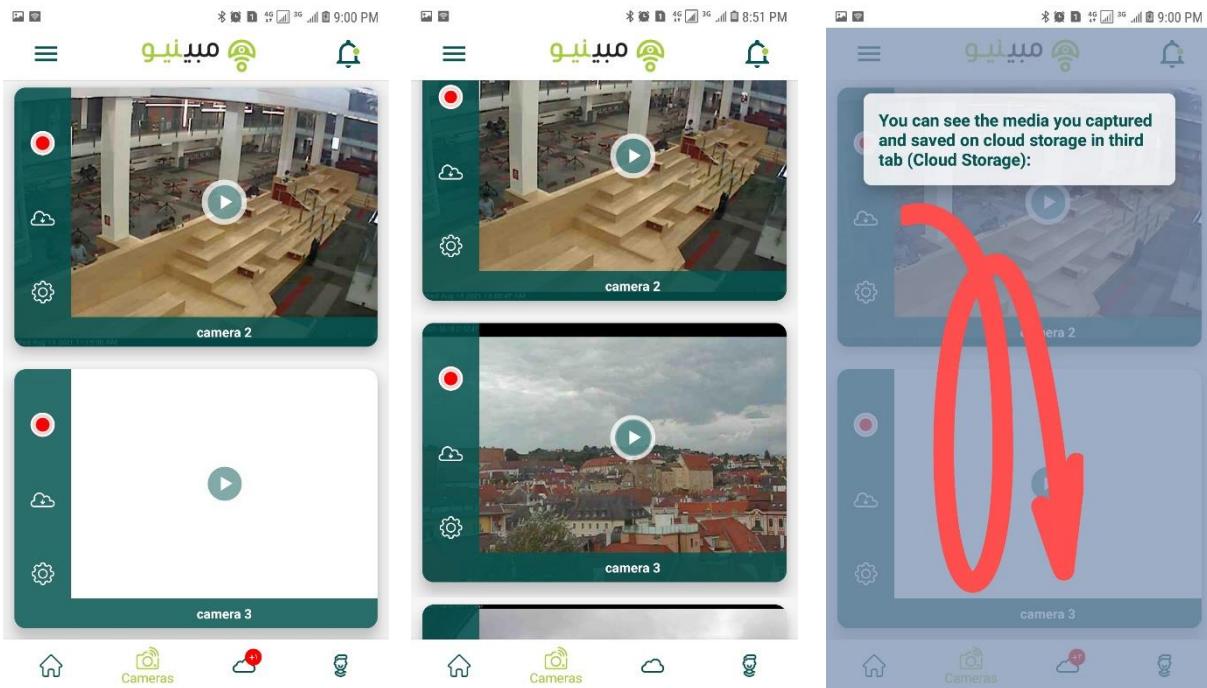
Login Page (compatible with Google Passwords Manager) (compatible with fingerprint, Face-ID, iris scanner):

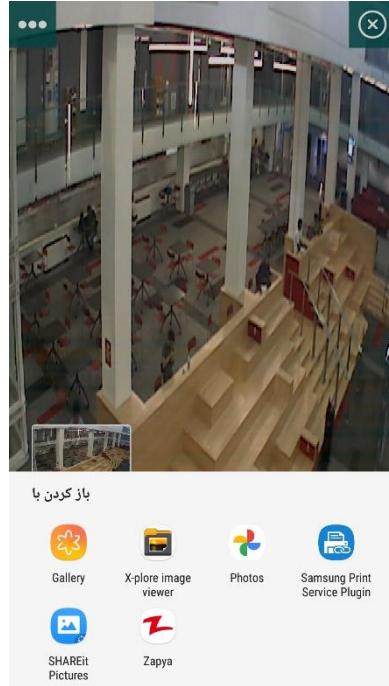
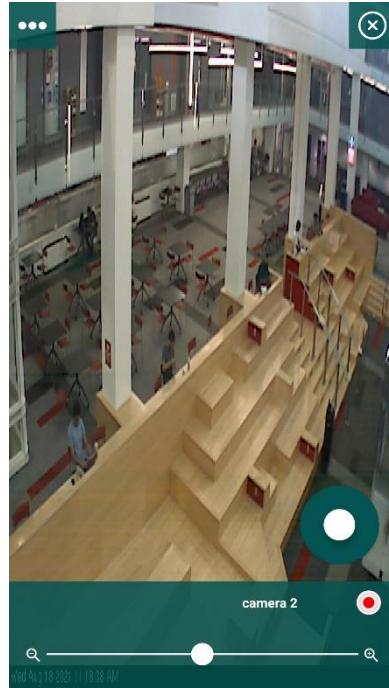


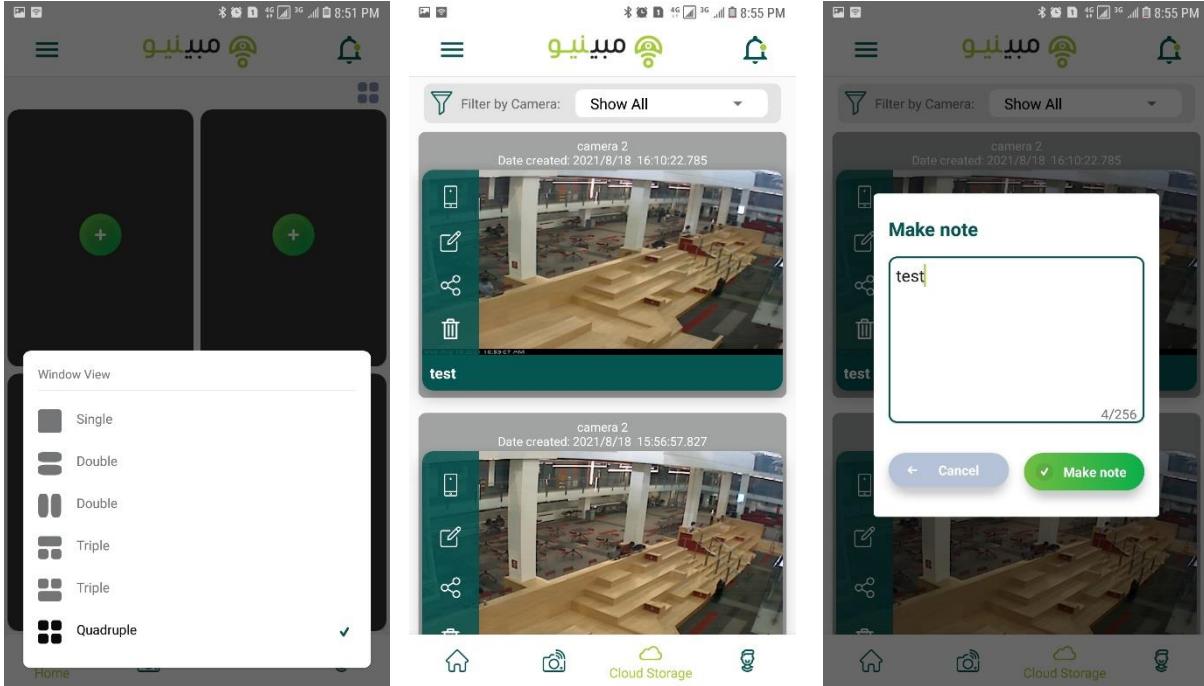
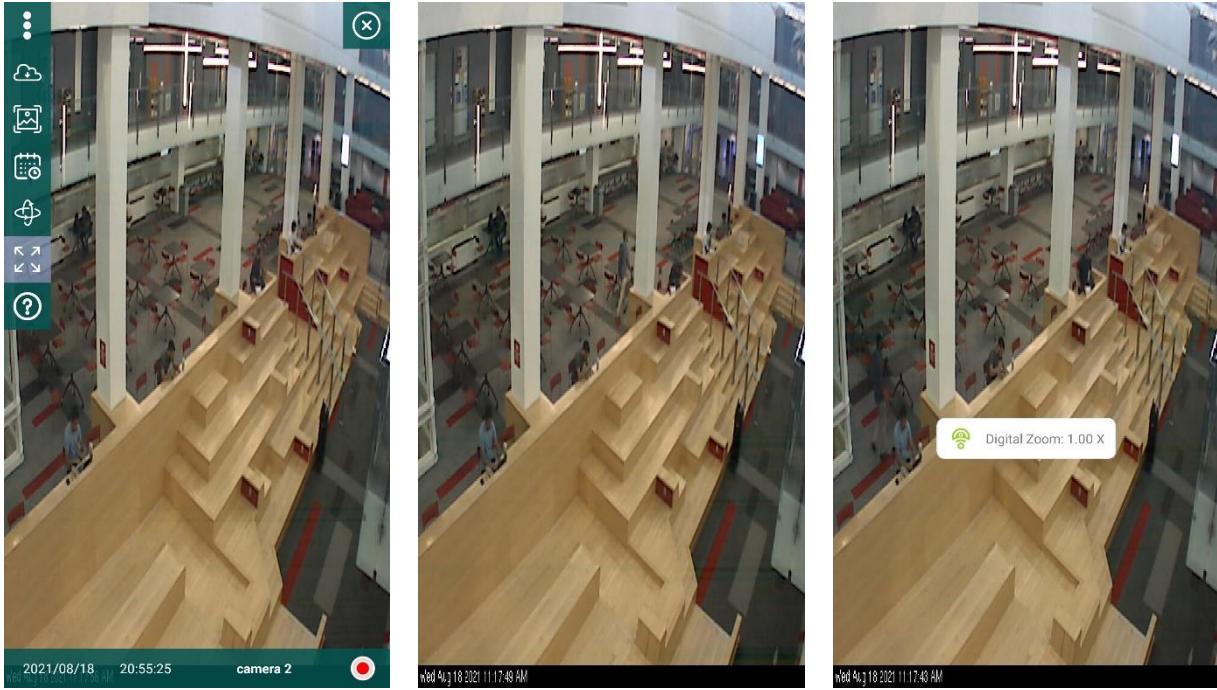
Walk-through I implemented in App:











"camera 2" technical specifications:

Camera Type: Sunell

Camera Web/IP Address: <http://129.10.161.241/mjpg/video.mjp>

Camera Username: admin

Camera Password: Camera Password

Port: 0

Send Request

Cancel

Stream Port: 0

"camera 2" technical specifications:

Camera Type: Sunell

Camera Web/IP Address: <http://129.10.161.241/mjpg/video.mjp>

Camera Username: admin

Camera Password: Camera Password

Port: 0

Send Request

Cancel

Stream Port: 0

Video Export Request:

Camera Name: camera 2

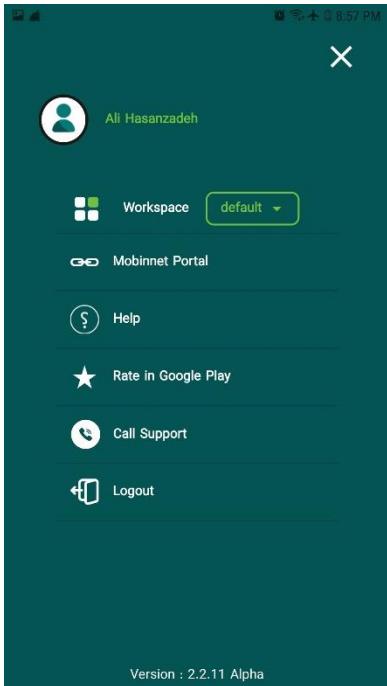
Start:

End:

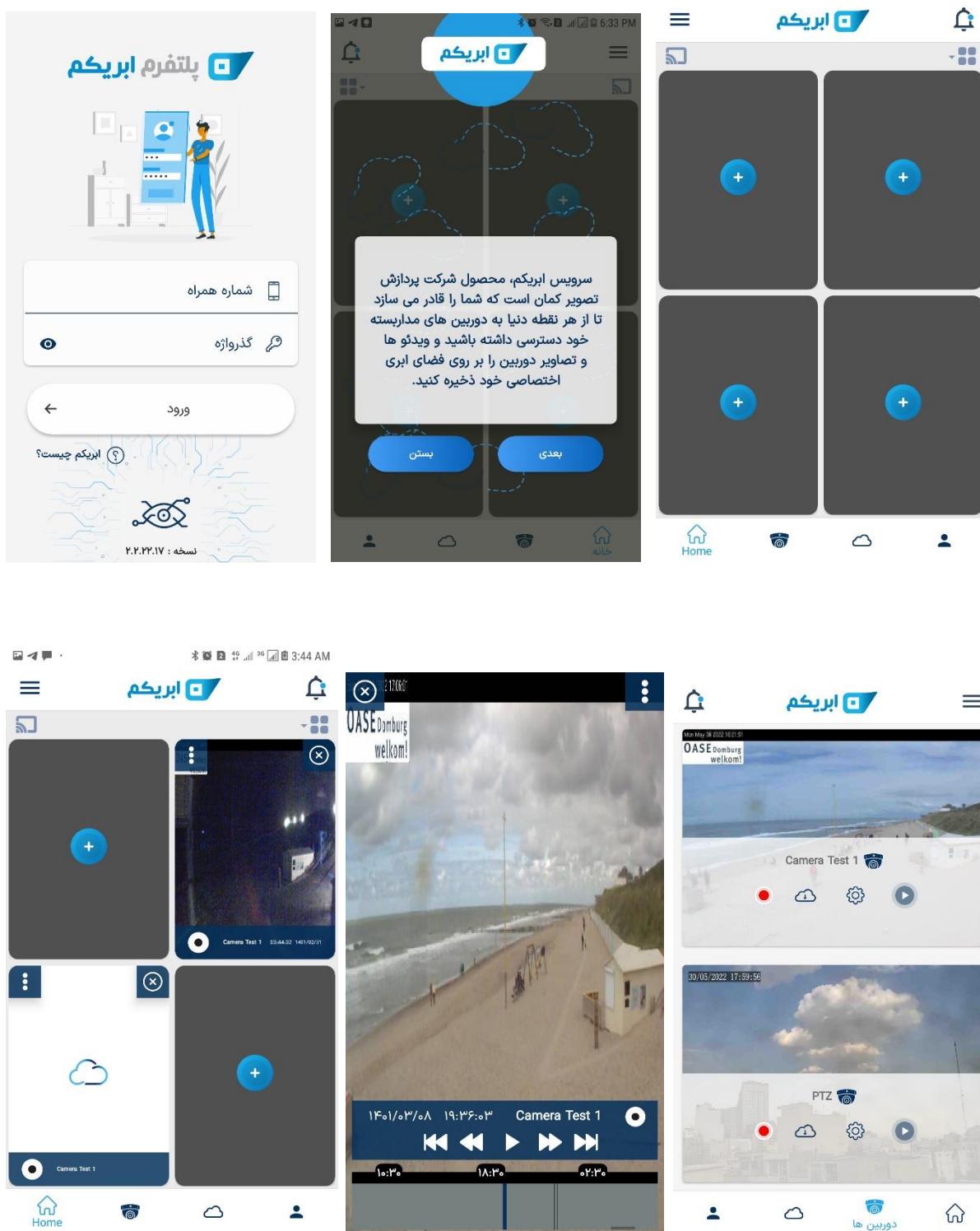
Output File Format: MKV

Send Request

Cancel

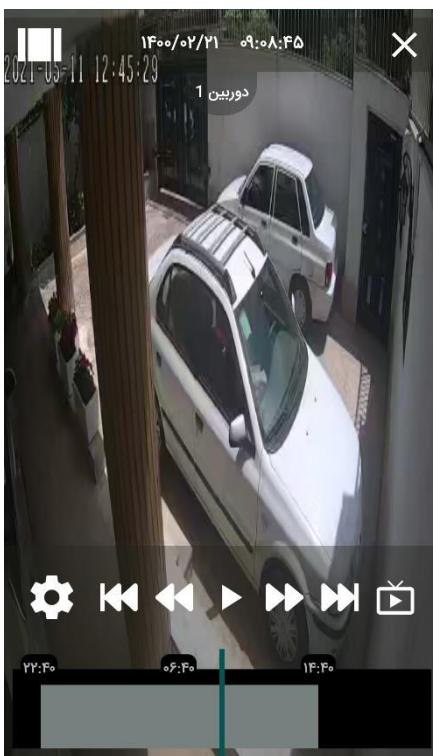


Abricam (B2B version/flavor of Mobinio) (Co-Designer and Sole-Developer):





Mobinio version 1 (In Persian) (Sole-Developer):

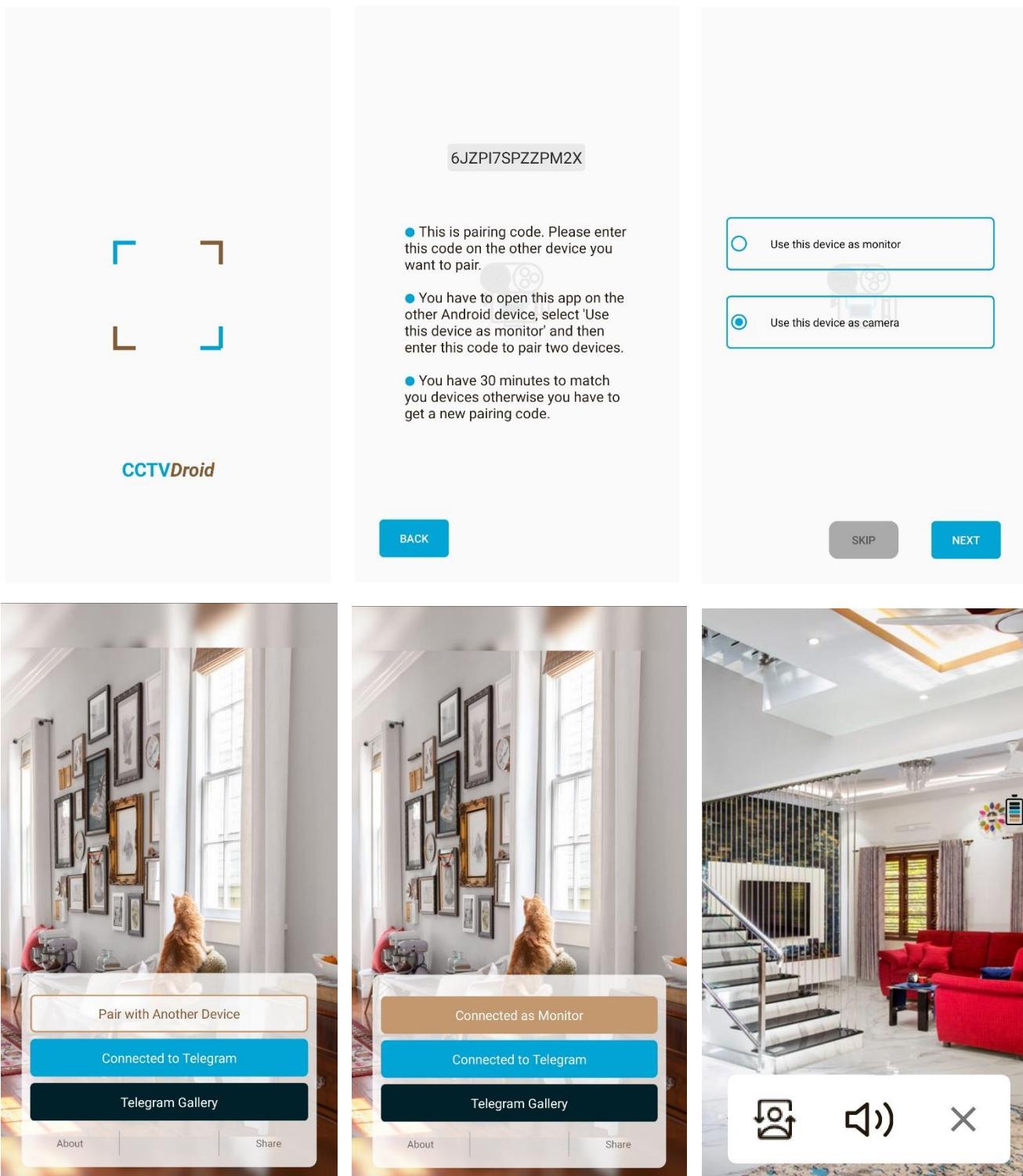


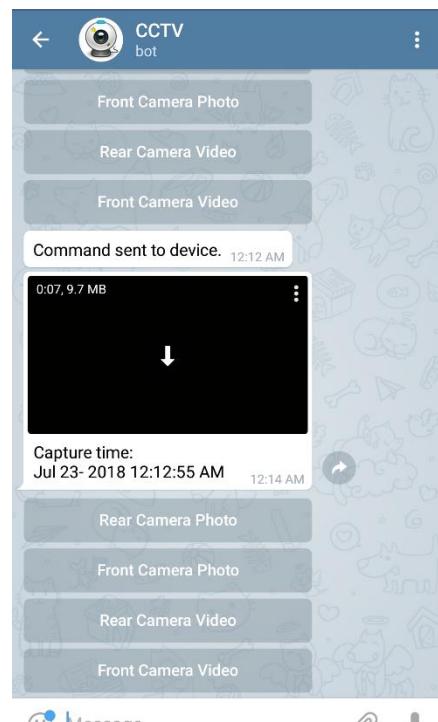
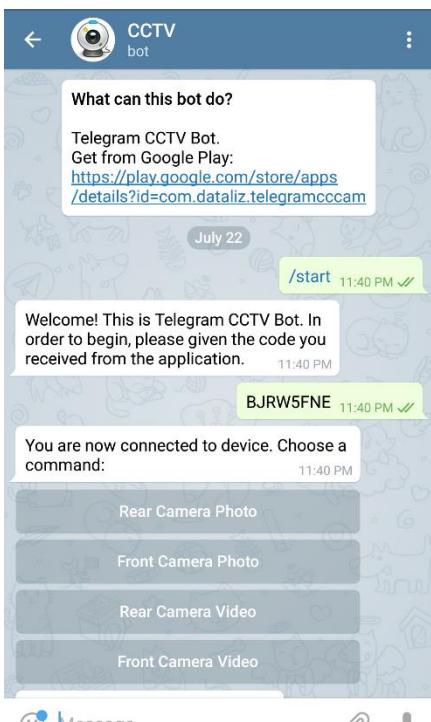
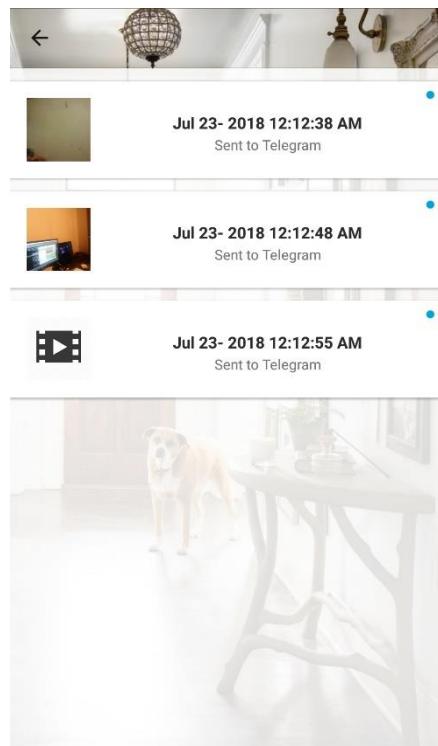
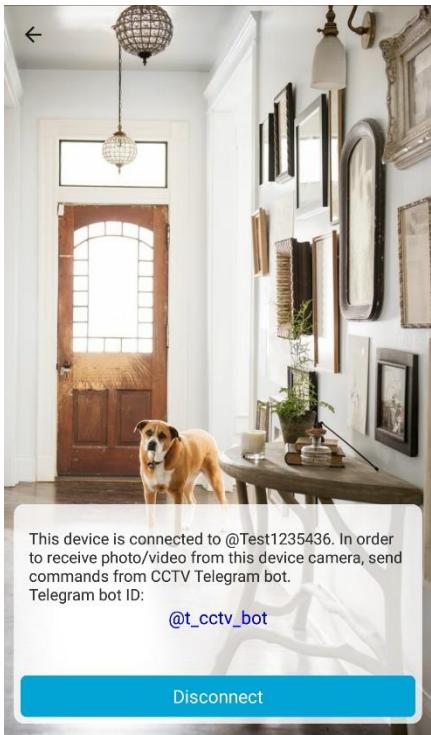


This app, ordered by a major telecommunication company in Iran, is functioned to stream user's CCTV cameras on the phone and show a timeline to user to seek around using Android MediaCodec to decode h264 streams and single frames. There is also a customized decoder to decode MJPEG and implementation of custom buffer and frame dropper to improve streaming. It also provides "Pan and Zoom" camera functionality and shows user's images and videos on cloud.

CCTV Droid: ((Self-made app presented in Play Store), 60K+ downloads)

(Designer and Developer)





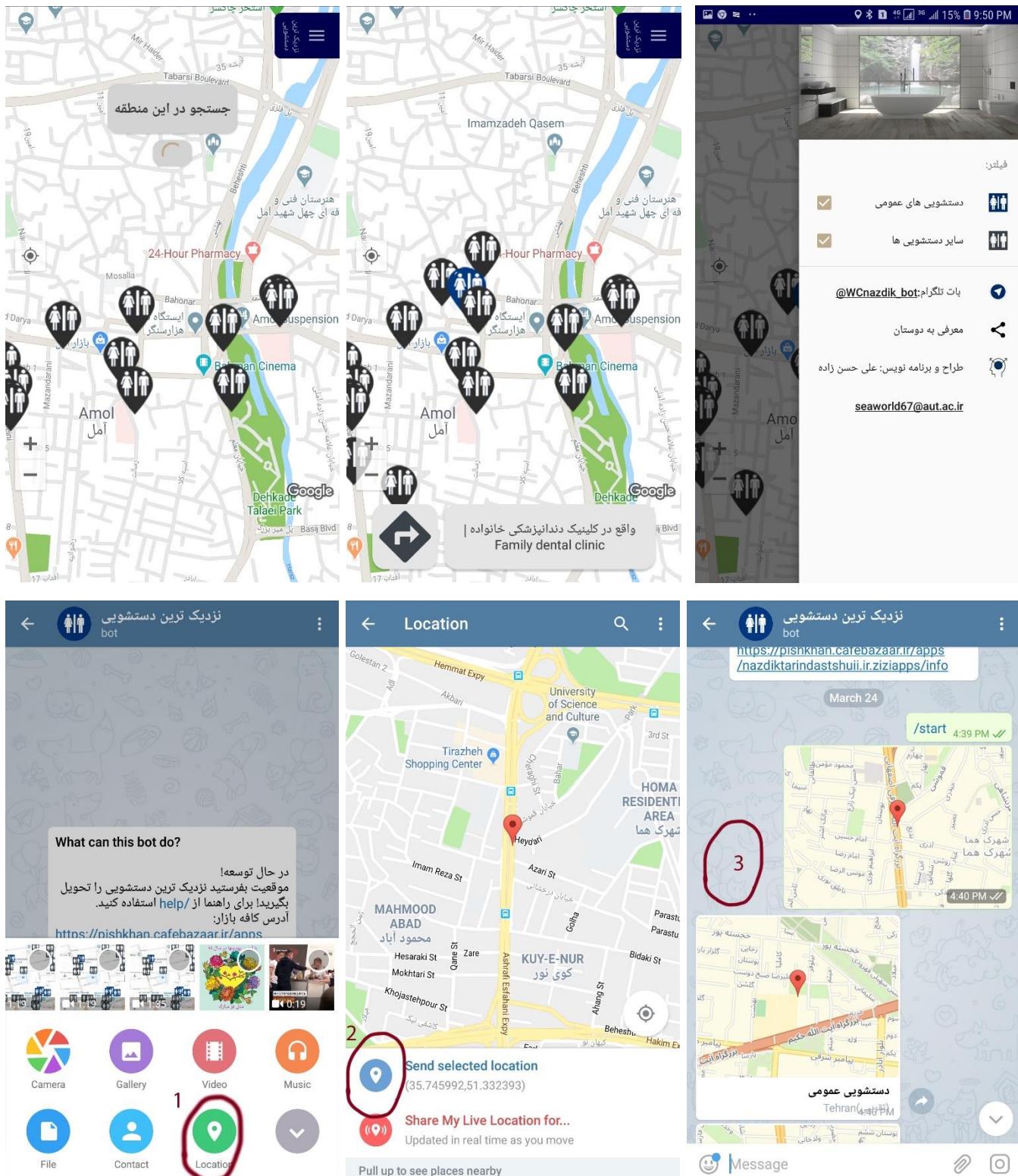
Using this Android app user can turn an Android device into a CCTV camera and another as monitor. User can place an android phone at home, when they are away they can see the pictures and videos from that device both live and via specific Telegram bot.

Front-end: Java

Backend: PHP/MySQL

Nazdiktarin Dastshuii (Closest WC) (Self-made app presented in Play Store)

(+ [Telegram Bot](#)) (Designer and Developer):



An app plus Telegram bot for simply finding the nearest WC in whole Iran, presented in Persian. User can filter by public or in-business-place WCs, show the info and find the route via a navigation application. (Backend: PHP/MySQL).

App for Infaction GMBH(Designer and Developer):

The image shows a mobile application interface for Infaction GMBH. The top half displays a dashboard with various statistics and news cards. The bottom half shows configuration settings and a footer with developer information.

My Dashboard

News

E German labour law and work contracts

de Number of job openings in Germany reaches historic high

Job Posts

- Total 170000
- Week -4.3% ↑
- Month -3.0% ↓
- Year 5.4% ↓

Candidates

- Total 170000
- Week 1.2% ↓
- Month -1.3% ↓
- Year 1.8% ↑

Temp-Work

- Total 2.3%
- Week -1.0% ↓
- Month 2.5% ↑
- Year 1% ↑

Kununu Ratings

- Addaco 4.3 -1.3% ↓
- Manpower 4.6 1.7% ↑

Animations:

- No animation
- Some Animation
- All Animations

Exit on Press "Back" (Don't go to "My Dashboard").

Brighter Theme

Company _____

Name _____

Show statistics of my industry in whole App.

Industry _____

My Position _____

My Bookmarks

Develop & Design: Ali Has.



Euronews German labour law and work contracts

Share German labour law is complex. Dr. Sandra Flämig advises on what you should or should not do when entering into a work contract, as well as covers the basics for maternity leave.

ep Number of job openings in Germany reaches historic high

Now is the time to be a jobseeker in Germany. With more than 1.2 million job openings recorded at the end of 2017, Germany is seeing its highest number of job vacancies since 1990. The number of job vacancies in Germany has hit a record high, according to a recent report from the Institute for E...

The Guardian German workers strike for right to two-year, 28-hour working week

Workers have downed tools at more than 80 companies across Germany as the country's biggest union stepped up its campaign for a 28-hour working week to allow employees to improve their work-life



All Germany	170000	0.0%	
Baden-Württemberg	12980	35.0%	>
Bavaria	16197	42.0%	>
Brandenburg	14863	9.0%	>
Bremen	12934	7.0%	>
Hamburg	10729	-39.0%	>
Hesse	14617	-18.0%	>



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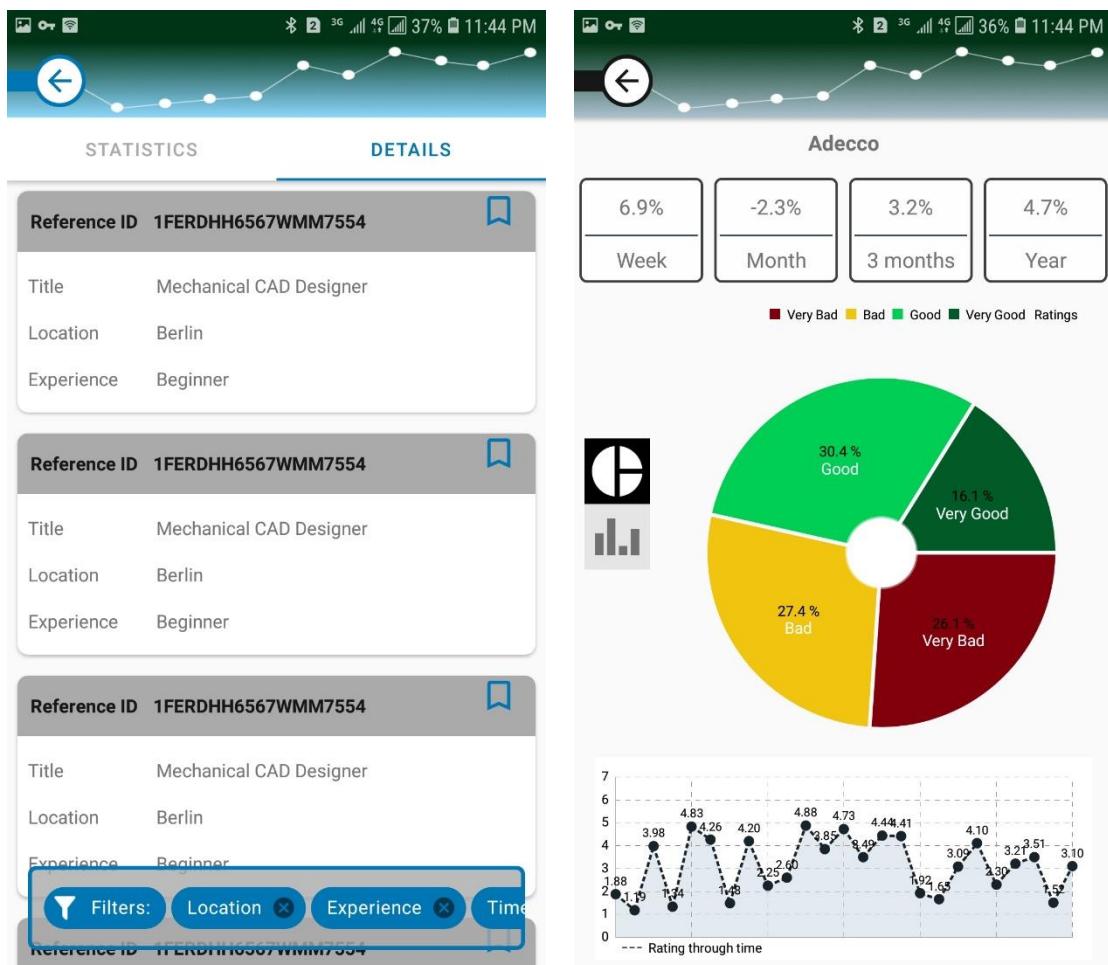
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Ranstad		-20.0%	10.0%
Adecco		30.0%	-10.0%
Manpower		-15.0%	20.0%
ZAG		30.0%	10.0%
Dekra Arbeit		30.0%	10.0%
Kötter Services		30.0%	-10.0%

Kununu Ratings



German labour law and work contracts

Share German labour law is complex. Dr. Sandra Flämig advises on what you should or should not do when entering into a work contract, as well as covers the basics for maternity leave.

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German workers strike for right to two-year, 28-hour working week

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STATISTICS DETAILS

Jobs in Bremen

6.9%

Week

-2.3%

Month

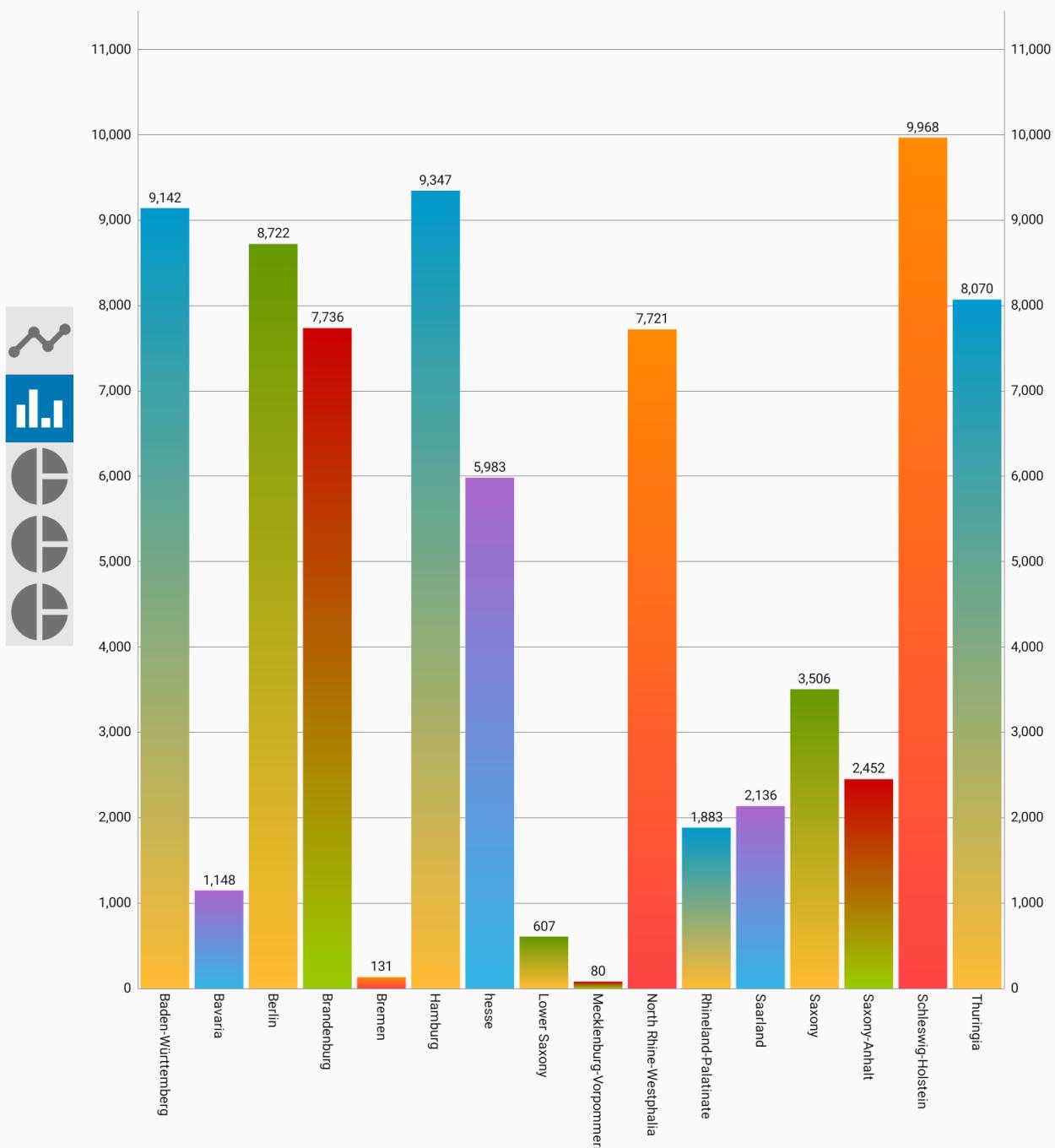
3.2%

3 months

4.7%

Year

Number of Jobs by state



Filters:

Location

Experience

Time Interval

Industry

Part/Full Time

Blue



Dekra Arbeit

6.9%

Week

-2.3%

Month

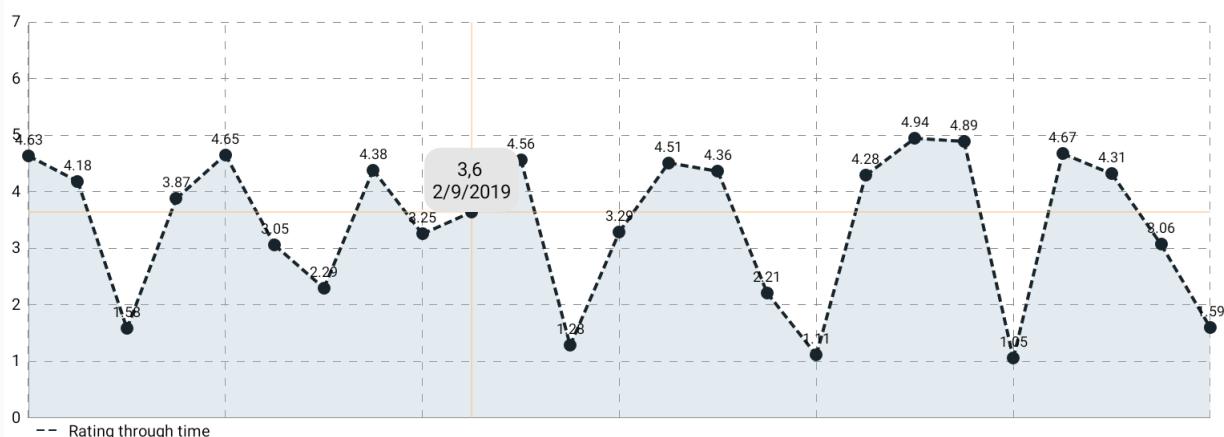
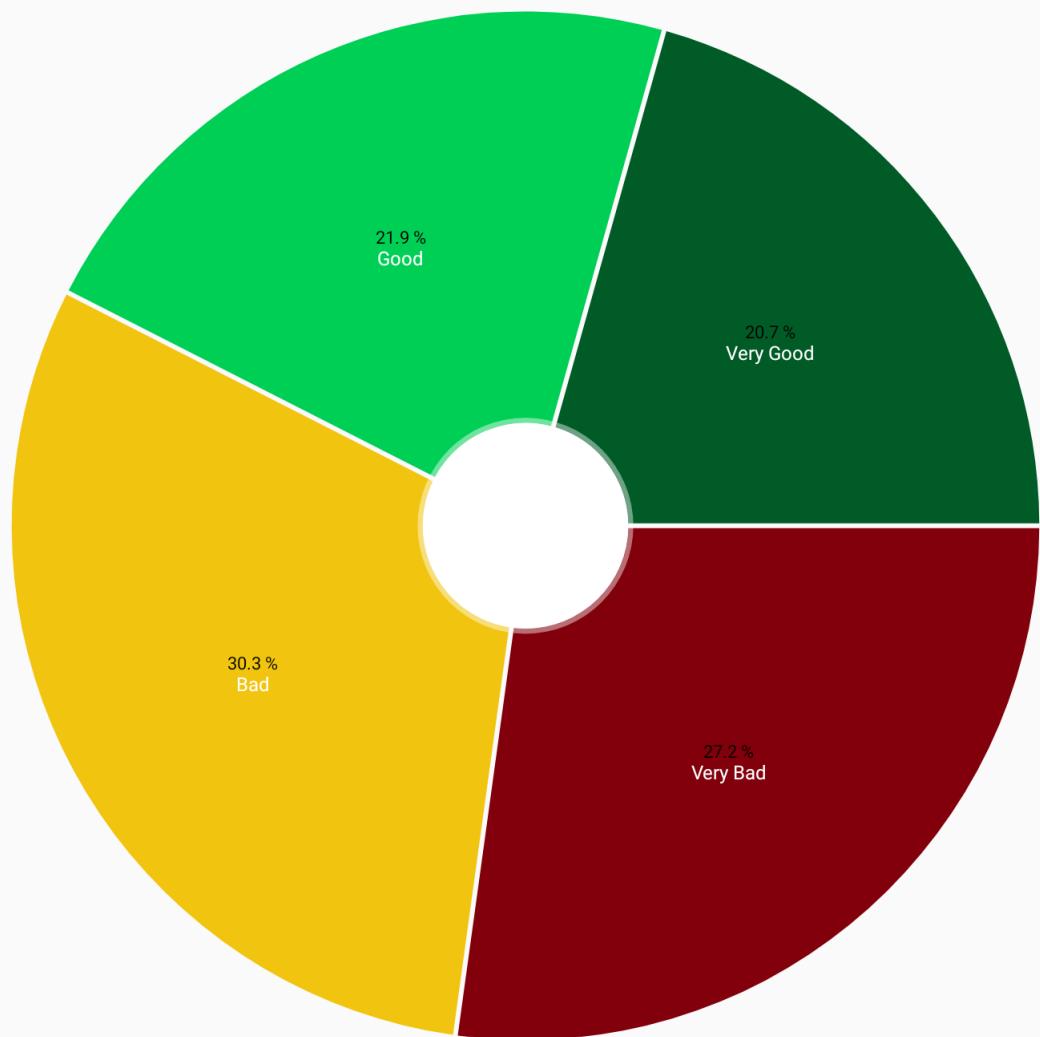
3.2%

3 months

4.7%

Year

■ Very Bad ■ Bad ■ Good ■ Very Good Ratings





I.K. Hofmann

6.9%

Week

-2.3%

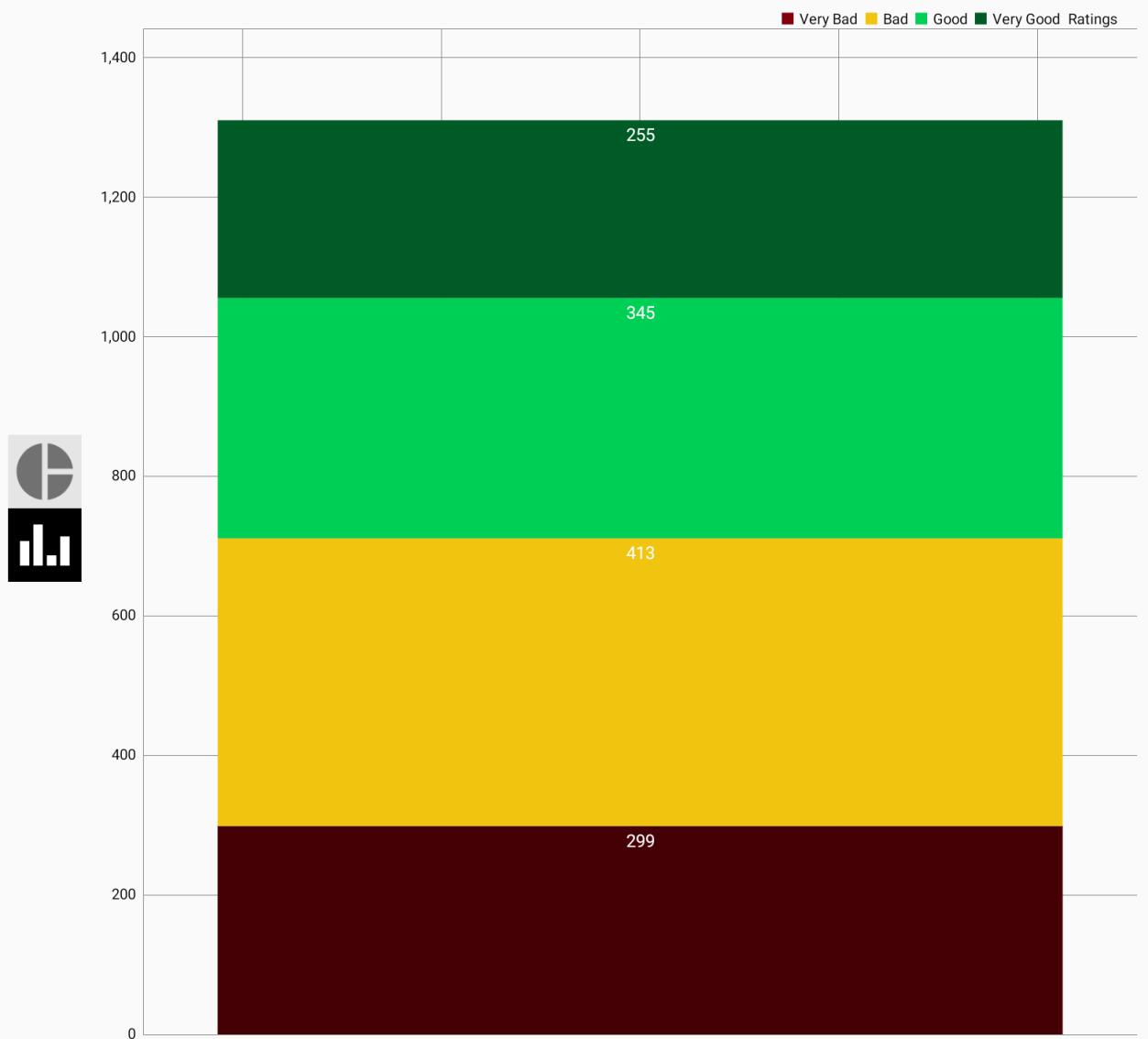
Month

3.2%

3 months

4.7%

Year





STATISTICS DETAILS

Jobs in Bremen

6.9%

Week

-2.3%

Month

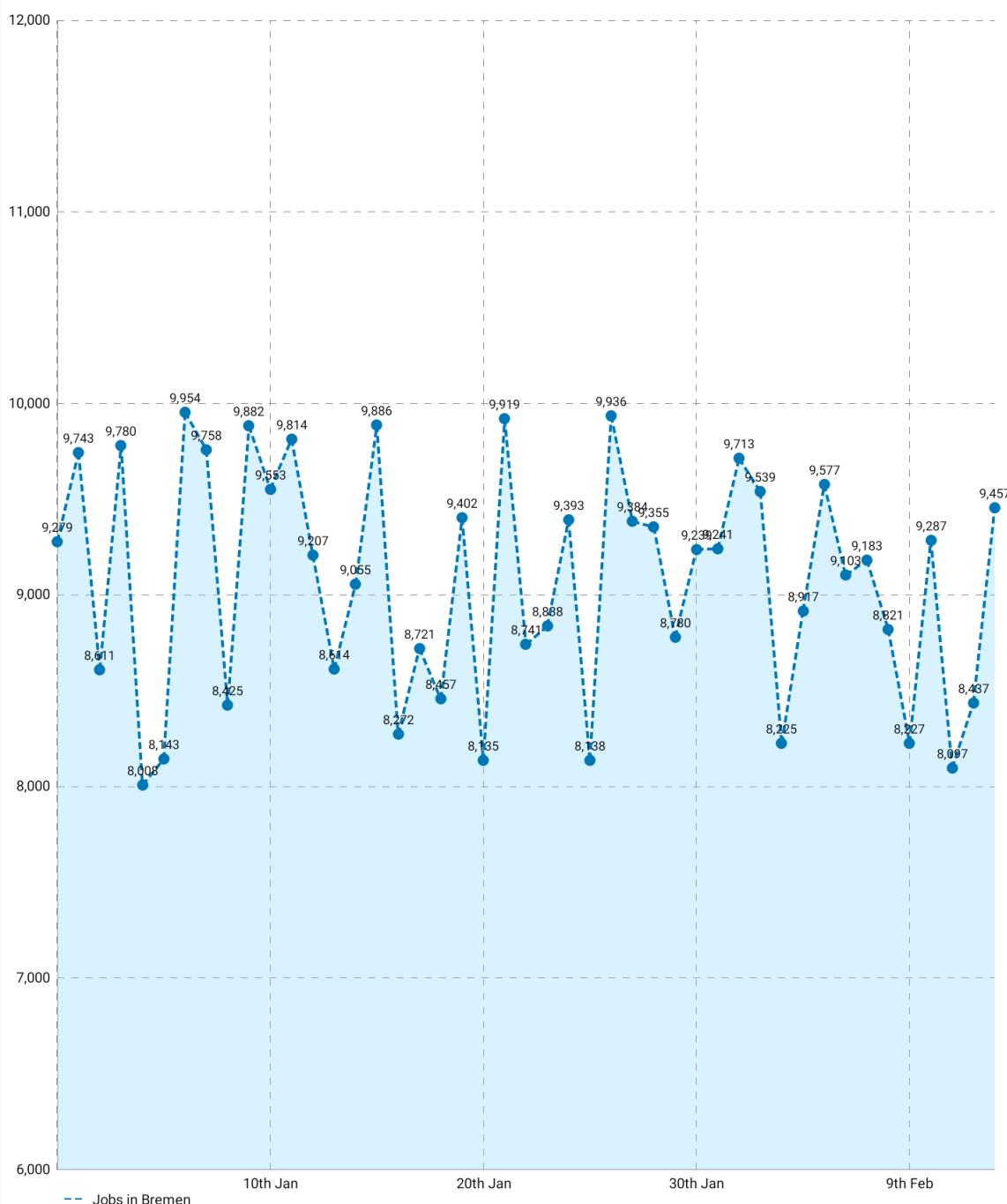
3.2%

3 months

4.7%

Year

Number of Jobs



Jobs in Bremen



Filters:

Location

Experience

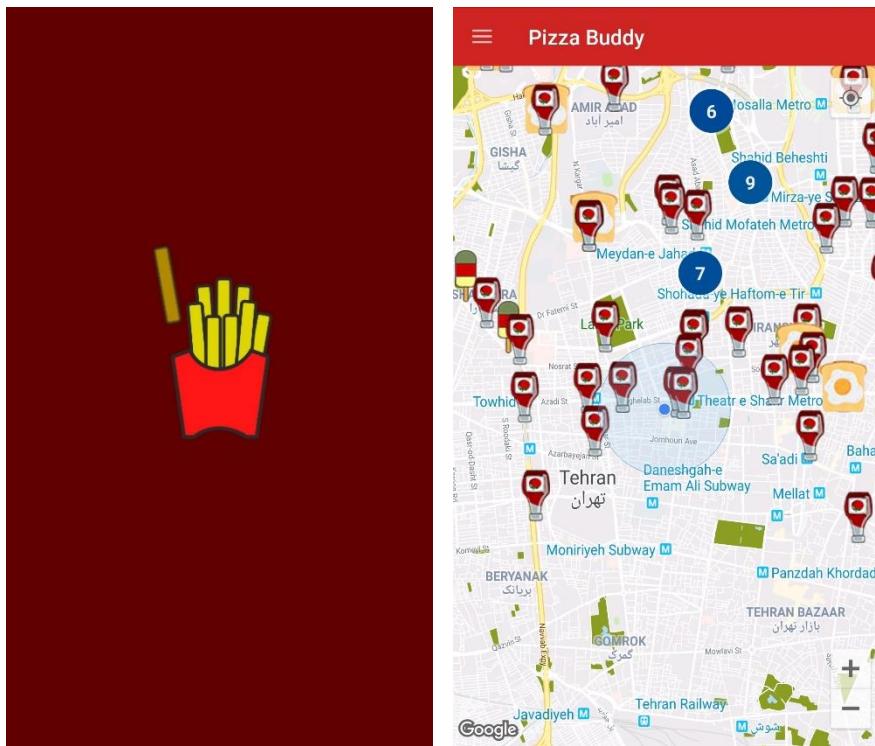
Time Interval

Industry

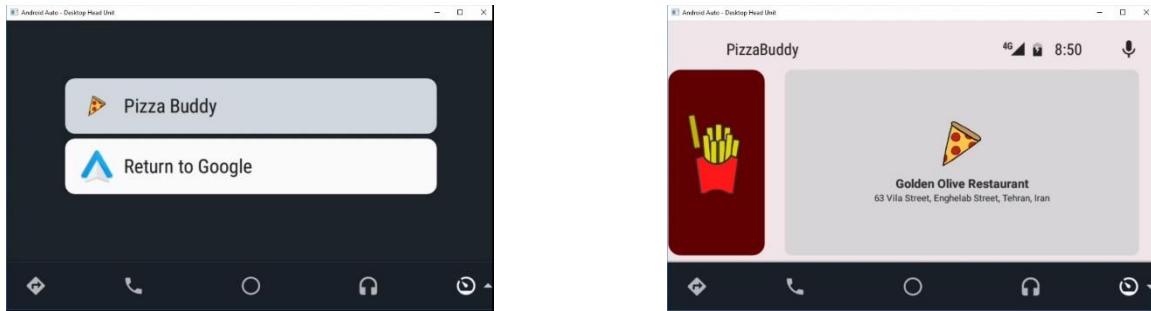
Part/Full Time

Blue

Pizza Buddy + Android Auto Support (Self-made app) (Designer and Developer):



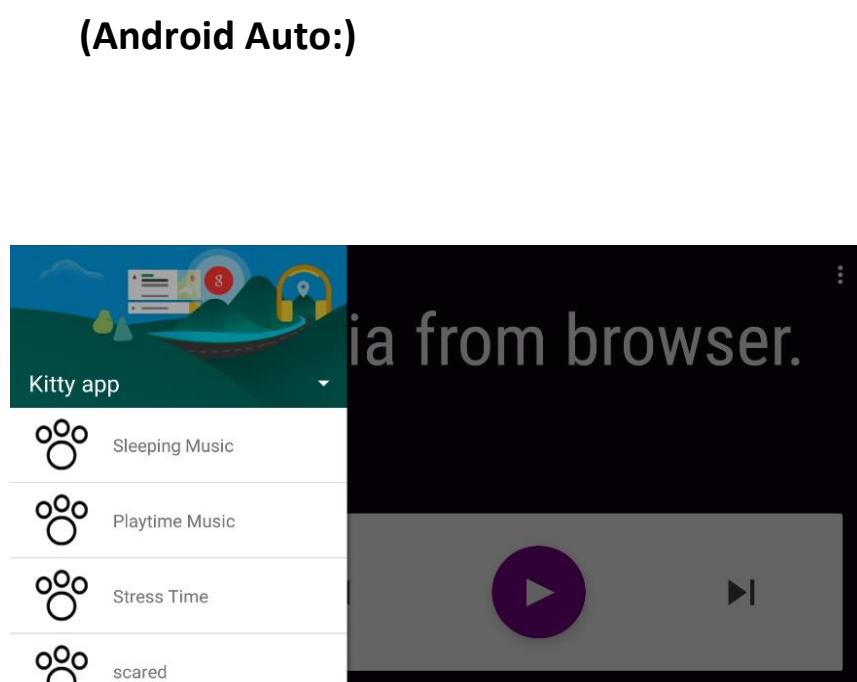
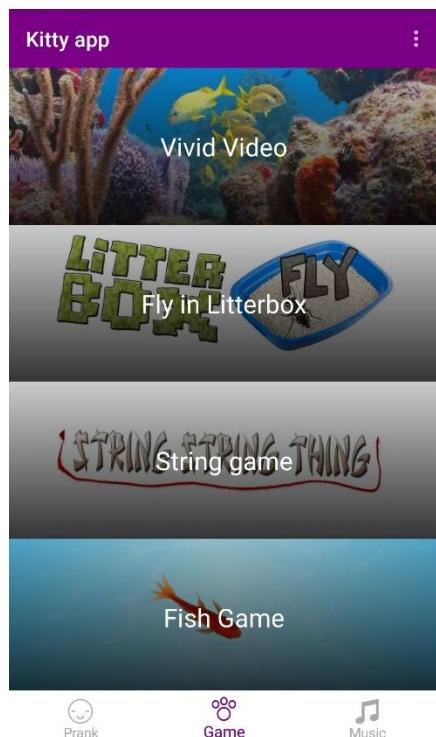
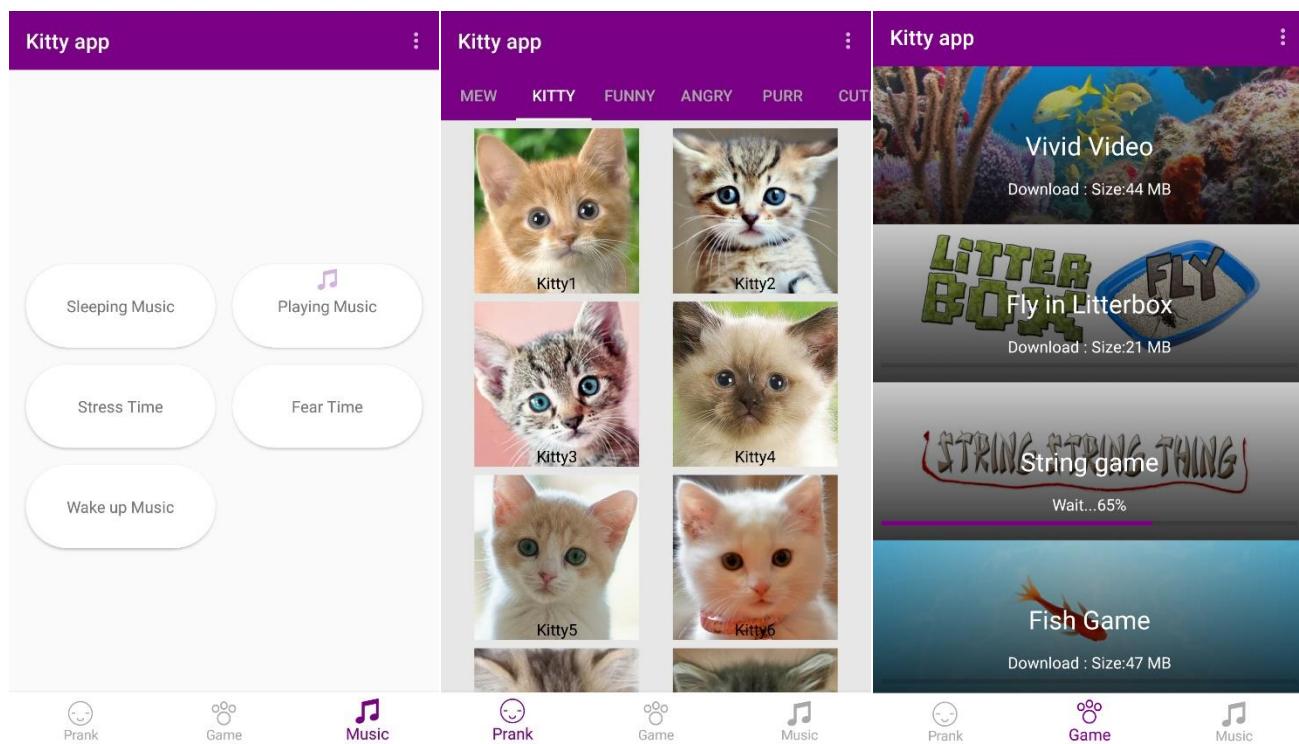
(Android Auto)



This application shows food coupons on map. It receives JSON file through Restful API, uses Google Maps API to show restaurants and distinguishes between breakfast (toast icons), ice cream and other restaurants and shows address and coupon details on a bottom sheet on user click, Google Maps style.

PHP backend scrapes Internet for restaurant and cafe offers.

Kitty App + Android Auto support (Self-made app presented in Play Store) (Designer and Developer):



An app for cats, containing music, pranks and downloadable videos and games. Java/Andriod, PHP Backend. (Last screenshot belongs to Android Auto)