

Cross-platform mobile application using ODEP for Resilink



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Plan

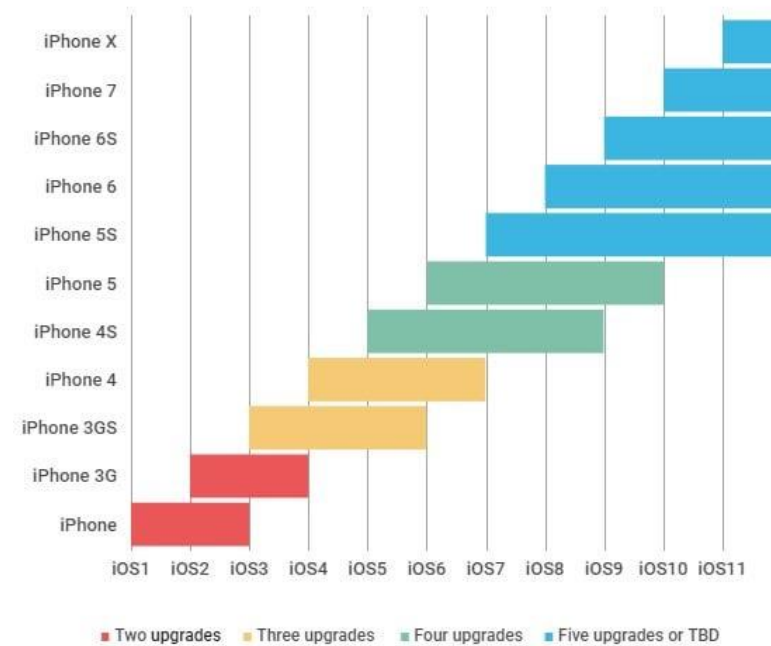
- **Implementation of the application**
 - Compatibility
 - Data management
- **Application**
 - Design
 - Main screens

Implementation of the application Compatibility

Android minSDK => 20 and IOS => 9

Version	SDK / API level	Version code	Codename	Cumulative usage ¹	Year	
Android 14 ^{DEV}	Level 34	UPSIDE_DOWN_CAKE	Upside Down Cake	—	TBD	
Android 13	Level 33	TIRAMISU	Tiramisu ²	20.0%	2022	
	* <code>targetSdk</code> will need to be 33+ for new apps and app updates by August 2023.					
Android 12	Level 32 ^{Android 12L}	S_V2	Snow Cone ²	40.8%	2021	
	Level 31 ^{Android 12}	S				
* <code>targetSdk</code> must be 31+ for new apps and app updates.						
Android 11	Level 30	R	Red Velvet Cake ²	61.9%	2020	
Android 10	Level 29	Q	Quince Tart ²	78.5%	2019	
Android 9	Level 28	P	Pie	86.6%	2018	
Android 8	Level 27 ^{Android 8.1}	O_MR1	Oreo	91.3%	2017	
	Level 26 ^{Android 8.0}	O				
Android 7	Level 25 ^{Android 7.1}	N_MR1	Nougat	94.0%	2016	
	Level 24 ^{Android 7.0}	N				
Android 6	Level 23	M	Marshmallow	97.9%	2015	
Android 5	Level 22 ^{Android 5.1}	LOLLIPOP_MR1	Lollipop	99.1%	2015	
	Level 21 ^{Android 5.0}	LOLLIPOP, L				
* Jetpack Compose requires a <code>minSdk</code> of 21 or higher.						
Android 4	Level 20 ^{Android 4.4W} ³	KITKAT_WATCH	KitKat	No data	2013	
	Level 19 ^{Android 4.4}	KITKAT				
	* Google Play services do not support Android versions below API level 19.					
	Level 18 ^{Android 4.3}	JELLY_BEAN_MR2	Jelly Bean			
	Level 17 ^{Android 4.2}	JELLY_BEAN_MR1				
	Level 16 ^{Android 4.1}	JELLY_BEAN				
Level 15 ^{Android 4.0.3 - 4.0.4}	ICE_CREAM_SANDWICH_MR1	Ice Cream Sandwich	2011			
Level 14 ^{Android 4.0.1 - 4.0.2}	ICE_CREAM_SANDWICH					
* Jetpack/AndroidX libraries require a <code>minSdk</code> of 14 or higher.						

iOS Version Support for Each iPhone



Implementation of the application

Data management

Package SharedPreferences



Saving data in String to the phone's internal storage:

- Language of the application (language at the launch of the application = language of the system thanks to the package l10n)
- User info (including api access token)

Implementation of the application

Data management

Package http



Allows to communicate with the ODEP API.

All the data to be used will be stored internally in respective maps/Classes in the application to be able to do the processing on them.

The processing is done by mapping at the moment.

Implementation of the application

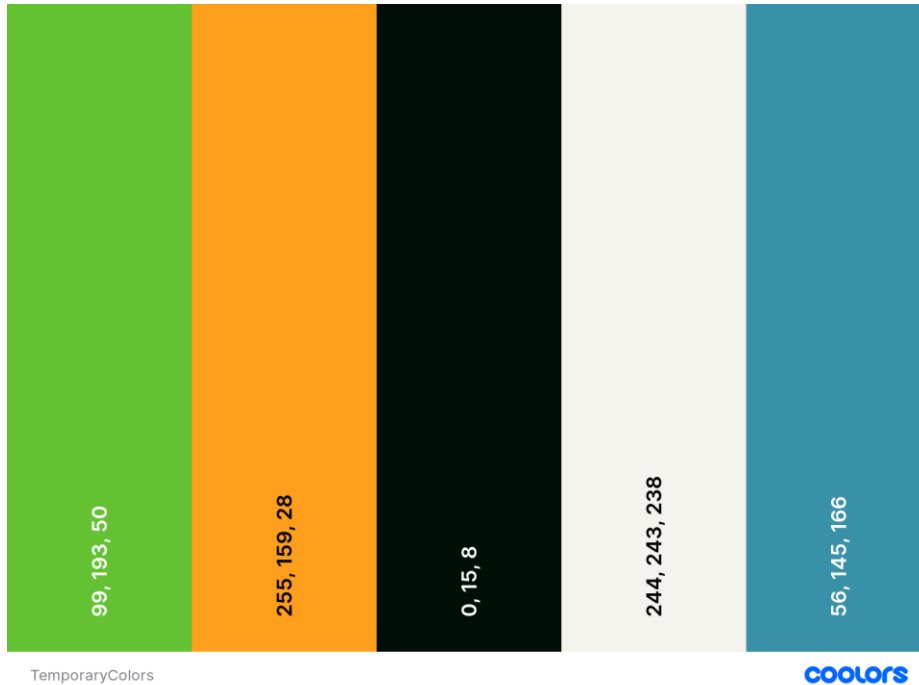
Data management

Imgur API / Postman

- To store photos in Imgur to avoid overuse of the cache
- Postman is a software to make http requests using the Imgur API
- Use to associate an image with an asset
- Stores in a local json file the association of the image and the asset

Application Design

Color template



Figma

[https://www.figma.com/file/RtYOihcRxTWU7WjN8L72XF/FigmaToFlutter-\(Community\)?type=design&node-id=0-1&t=P24XuH92LBM8sogD-0](https://www.figma.com/file/RtYOihcRxTWU7WjN8L72XF/FigmaToFlutter-(Community)?type=design&node-id=0-1&t=P24XuH92LBM8sogD-0)

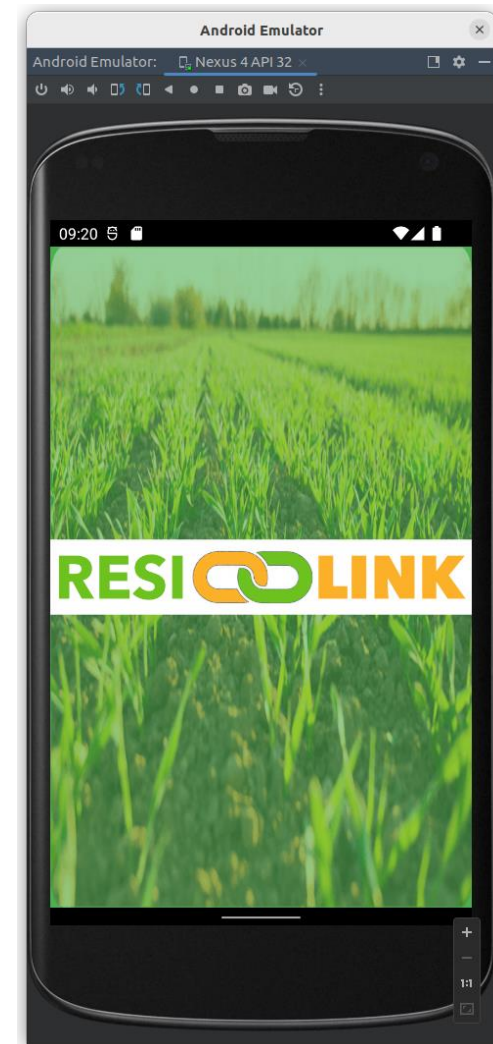
Link for editing

[https://www.figma.com/file/RtYOihcRxTWU7WjN8L72XF/FigmaToFlutter-\(Community\)?type=design&node-id=0%3A1&t=K4r3ZCgDtYZusdzU-1](https://www.figma.com/file/RtYOihcRxTWU7WjN8L72XF/FigmaToFlutter-(Community)?type=design&node-id=0%3A1&t=K4r3ZCgDtYZusdzU-1)

Application Main screens

Splash Screen

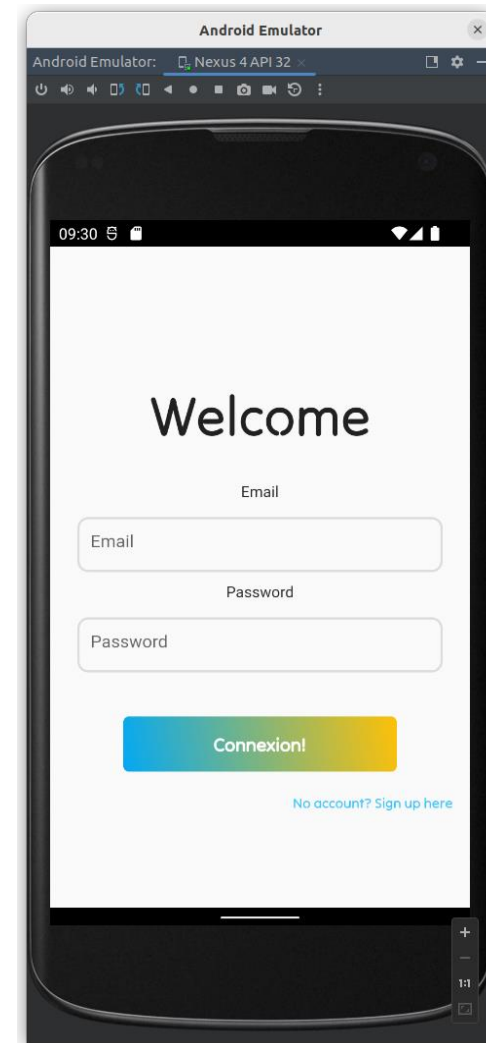
- During the installation, create 2 locals files, then check if the application language has already been set up.
- After the end of the installation, launch the splash screen (2s min) and check if a user is already logged on the application
- If user already registered, sends to main view otherwise to login page



Application Main screens

Login/register page

- Request to ODEP the token for the user or create his profile.
- Once token possessed, go to the main view

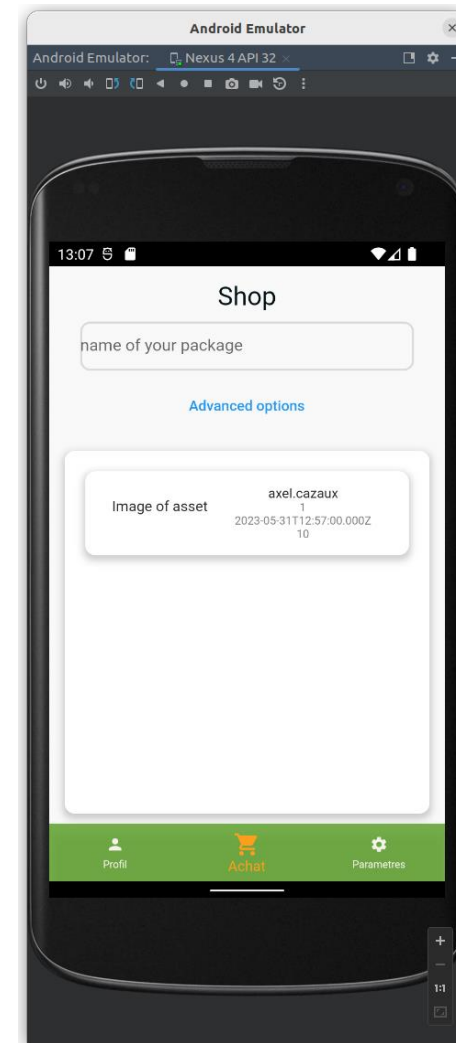


Application

Main screens

Main view + shop page

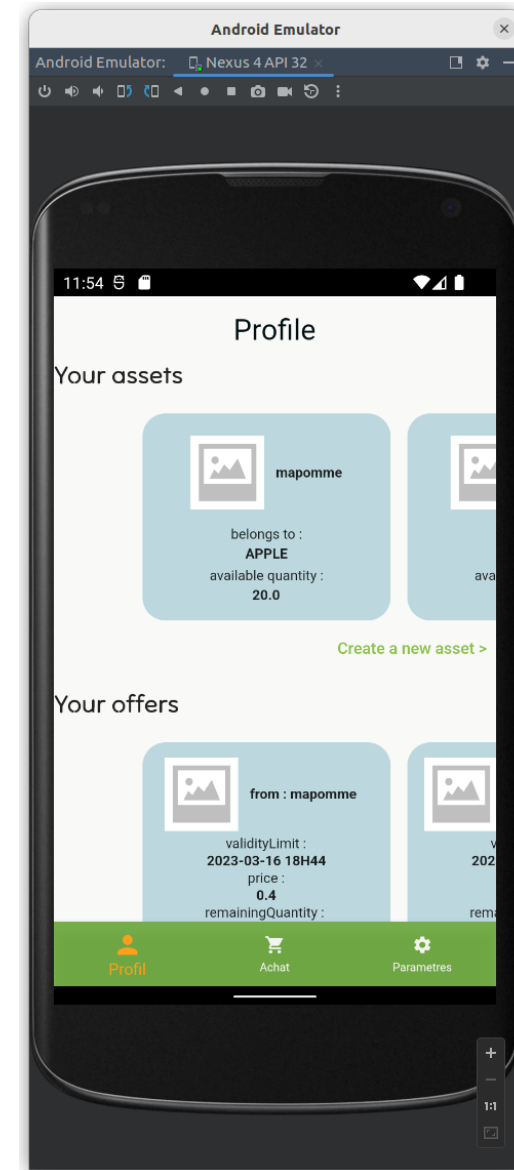
- Contains navigation bottom bar
- 3 pages from this view : Shop, Profile, Parameter
- In the shop page, view of the offers available in the framework of Resilink (Processing on data received from ODEP)
- On clicking an offer, pop-up summary + button to make a contract



Application Main screens

ProfilePage

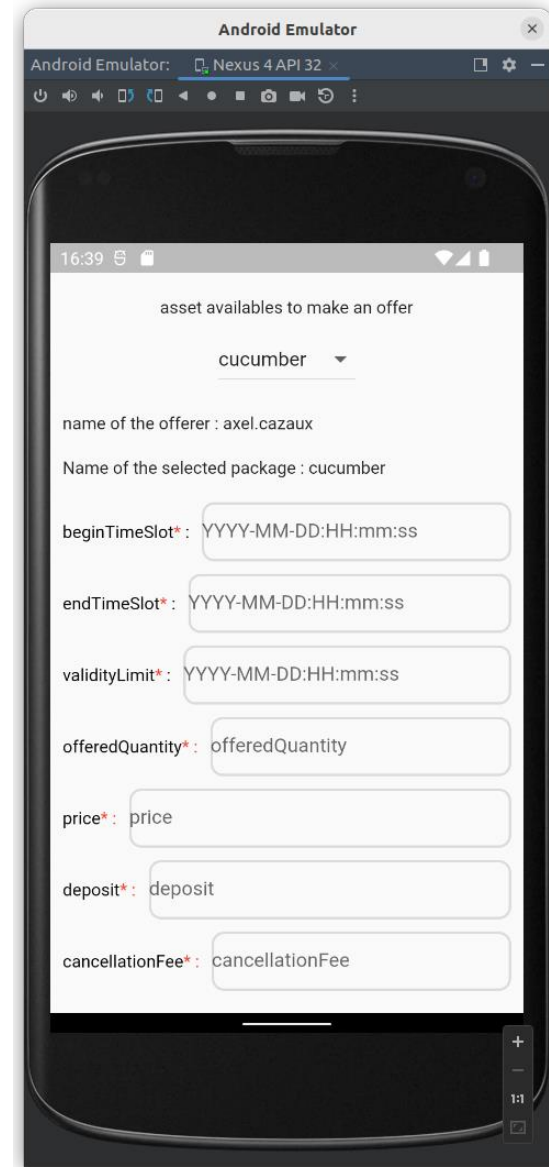
- Sees all assets/contracts/offers of the user
- Create an offer/asset
- Delete an offer/asset/contract
- Modify an offer/asset and update a contract



Application Main screens

Creation of an offer

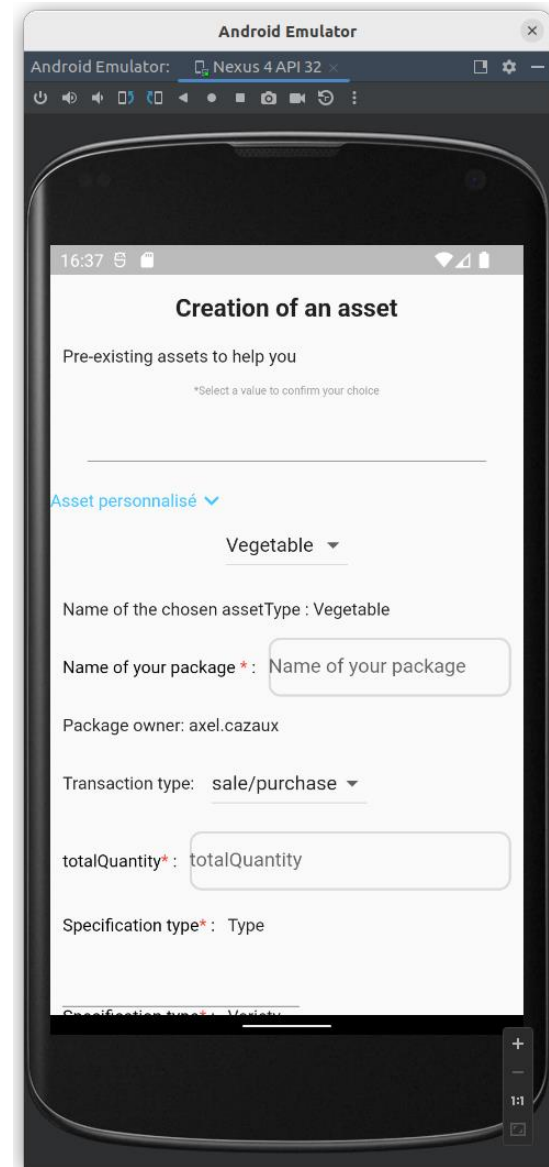
- From a valid user asset
- Depending on the asset, requires different prerequisites to complete



Application Main screens

Creation of an asset

- From a valid assetType
- Depending on the assetType, requires different prerequisites to complete
- 1 asset per AssetType



Application Main screens

Parameters page

- Profile modification (need for administrator account token) and profile logout
- Usable parameters: profile and language modification

