



# Majáles 2016 – Android mobile app

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## 1 Introduction

Majáles is a student's festival for celebrating student's life and upcoming May. We are part of a student union which organize this festival in our home city Ostrava. We want to move Majáles 2016 with this Android application to another level.

Every year there are about 16 000 visitors on this festival and we hope that at least some part of them can use our application. There are also lots of supporting events during whole month before the Majáles day. Our application should cover all of these parties.

## 2 Content of application and objectives

Main part of the application is of course line-up during the celebrating day, but there will be also a lot of addition important information.

### 2.1 News

Application should show news and also details about them. When administrator adds some news to a web application, it automatically sends notification to all mobiles phones where the application is installed. User will be noticed there is new article in news section.

News consists of these information

- Heading
- Main text
- Image related to the article
- Publication date
- Link to the original article on webpage

### 2.2 About and information

The most important is to find the correct place of the festival. In this part user can see the address and he can also start GPS for navigation to the entrance place and the cash desk.

During these days social networks are also huge parts of our lives. Because of this, links to all the main social networks are also available on this screen.

Last part will contain some general information about the festival.

### 2.3 Line-up

Why people attend this festival? To enjoy great time with friends and a day full of music performances. Line-up is the main part of our application. You can see all the bands and the time in which they are playing together with information on which stage they are performing.

There can be lots of stages where bands can play. Last year we had 9 stages, but there is no need to have so many information about them. These 2 are sufficient:

- Name of stage
- Number of stage

We have these information about every band or a show:

- Name of the band or show
- Starting time of playing
- Ending time of playing
- Stage
- Facebook link (optional)
- Twitter link (optional)
- Bandzone link (optional)
- YouTube link (optional)
- Soundcloud or mixcloud link (optional)
- Web page link (optional)

### 2.3.1 Build your own line-up

During festival, you don't have time to look into program and checking what time it is and on which stage you would like to be again and again and ... For this reason, you can build your own line-up.

Simply select which bands are you favorite, add them to your line-up and put your mobile phone to your pocket. 10 minutes before your favorite band will start, you get a notification about it and you know you should move to another stage.

### 2.4 Map of areal

It's nice to know that it's the time you should move to another place for your favorite band, But do you know where the stage is located? Areal is big and there are 16 000 students! You need a map of your areal. The map is only simple picture, where you can see all the important places in the areal.

### 2.5 Practical info

There are some safety restrictions, tips for public transport, entrance, places with merchandise of our festival or bands and many others important information.

All of these are also available in this application. Every article consist of:

- Name of the article
- Image of the article
- Text
- Link to website containing original article

### 2.6 Supporting program

As we said before, before the big day, there are lots of others activities. Last year we had for example warm-up party, but also literature night, skate contest, board games tournament and many others.

Some of these events can be organized by others student organizations, and we only put them to our supporting program. For this reason most information are on Facebook so we provide only link to this event in our app.

We can show these information about every event:

- Name of the event
- Date and time of the event
- Short perex
- Link to Facebook event

## 2.7 Parade

Parade in masks is the most historical part of Majáles. Students are going through the city in masks and they ends in the area of festival. There after small evaluation, rectors of two biggest universities in Ostava award the best mask. This is also the time of official start of Majáles. The parade is also part of supporting program.

We have these important information about parade:

- Text of article
- Link to Facebook event
- Link to web to original article

## 2.8 Majáles shop and club

There are many ways to buy merchandise or tickets. In this part, there are links to e-shop for e-tickets, badges and many others must have souvenirs.

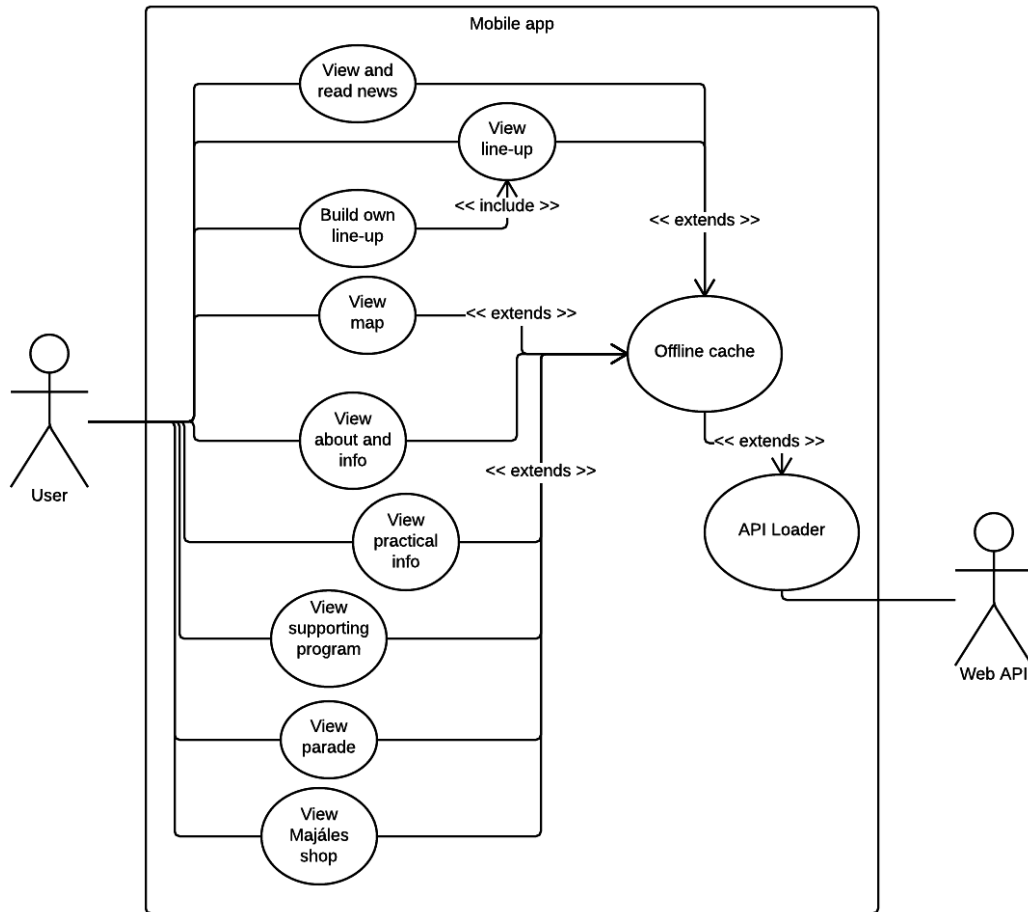
Partners every year provides discounts in their shops before Majáles. For this purpose you need to register into Majáles club, where you get discount card.

There will be links to others websites only:

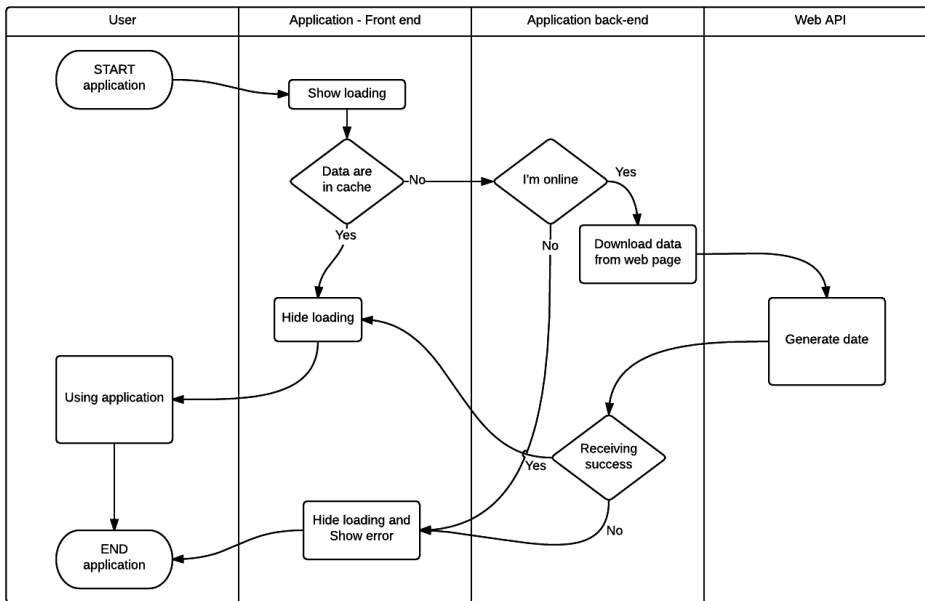
- Link to form for buying tickets
- Link to e-shop with merchandise
- Link to discount club

### 3 Use case

Application is only with information character, except building your own playlist. Use case is for this reason very easy.

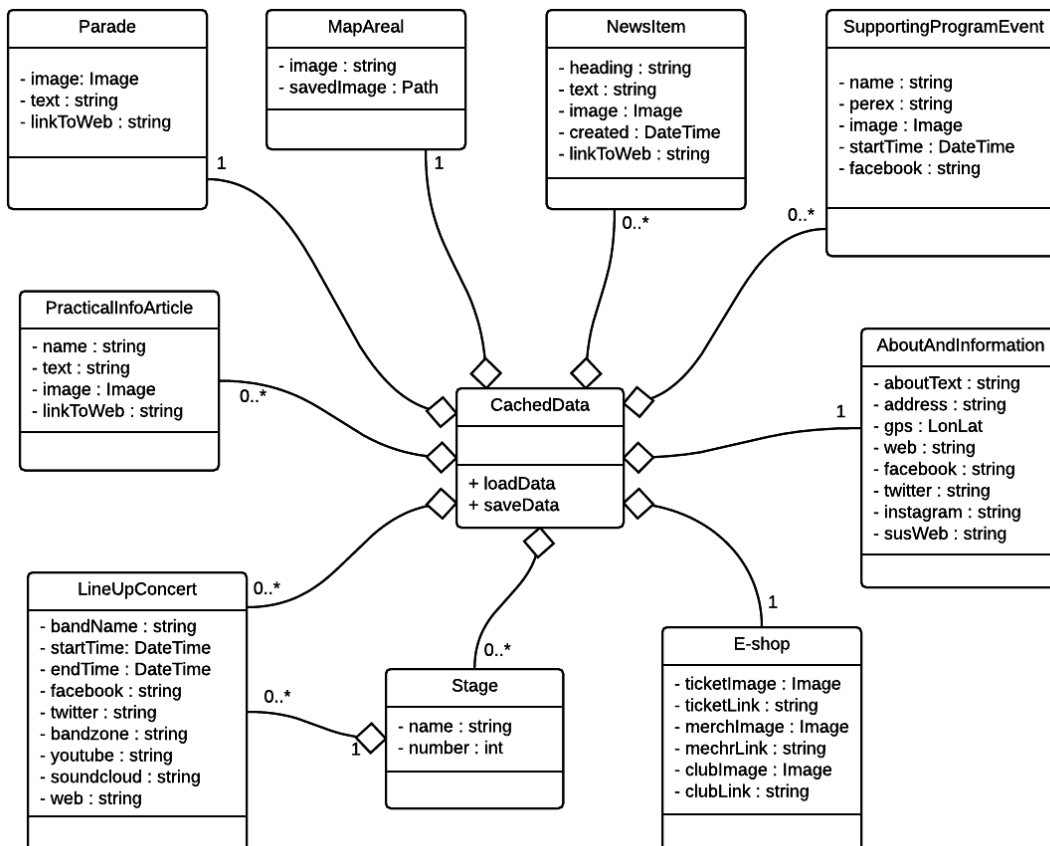


## 4 Usage workflow



## 5 Class diagram

All data are cached together in one container `CachedData`. This object will be saved and also everything from `WebAPI` will be loaded into this class.



## 6 Mockup

Working mockup can be found on Ninjamock: <https://ninjamock.com/s/RT43T>

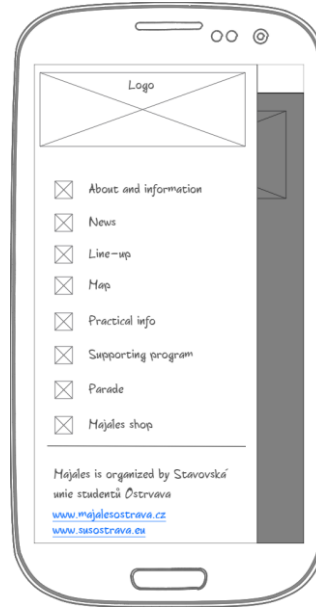
### 6.1 Main activity

Main activity with countdown to Majáles day



Material design menu

Opened material design menu

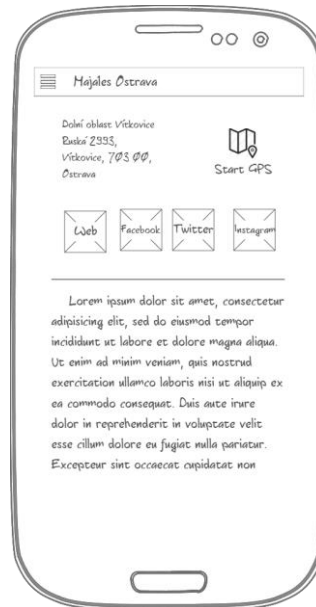


Main activity when Majáles is running



### 6.2 About and information

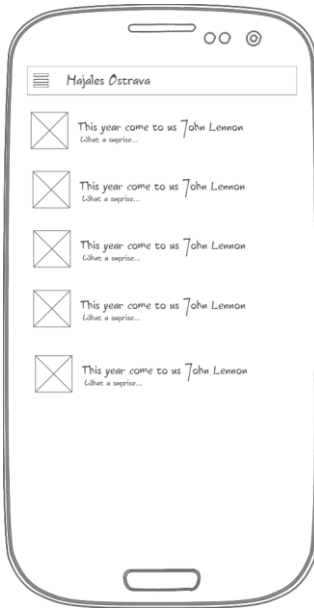
Links to social networks and address



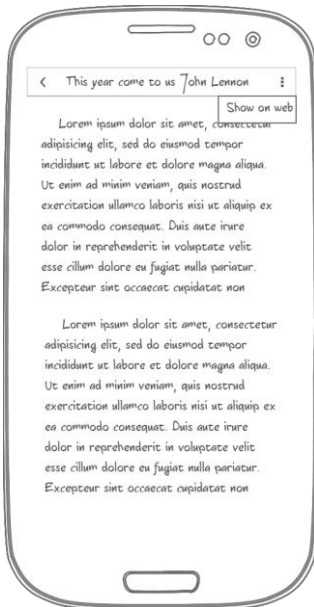


## News

### List of all news

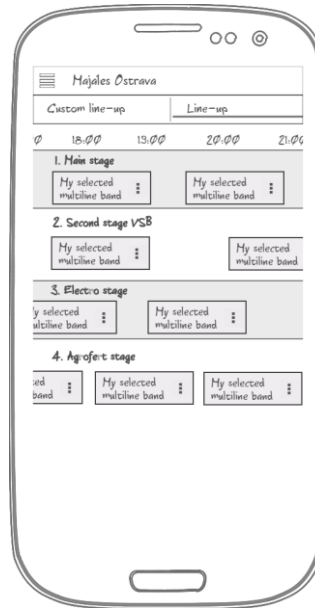


### Detail of news and link to web

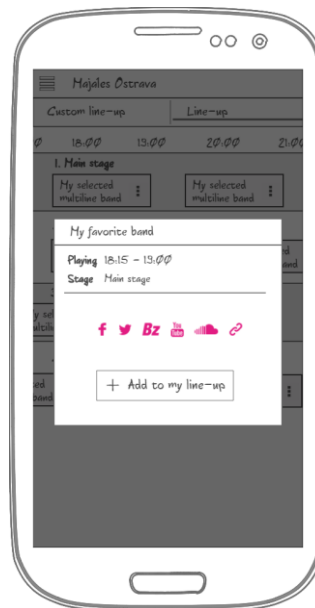


## Line-up

### Whole line-up

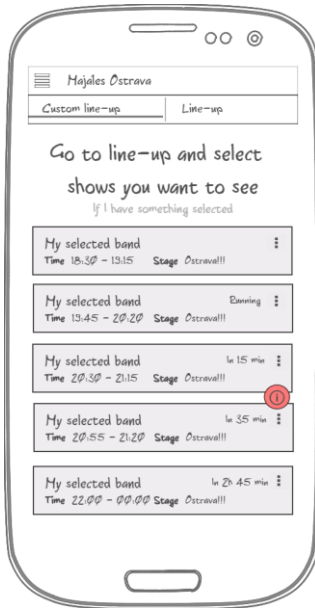


### Detail of band



## Custom line-up

### Custom builded line-up

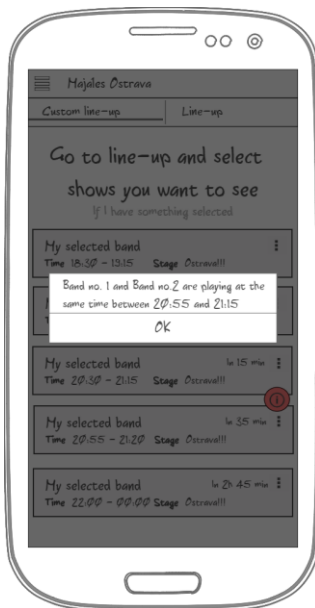


## Map of areal

### Map can be zoomed



## Alert of crossing bands



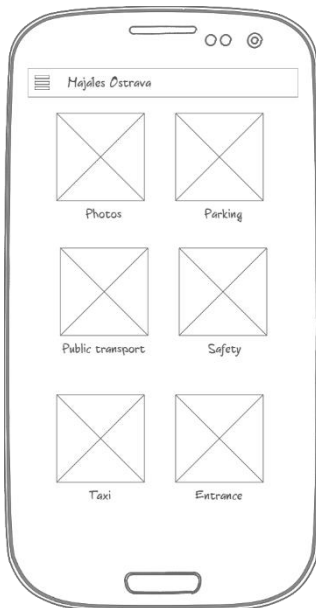
## 6.3 Supporting programe

### List of all events before Majáles

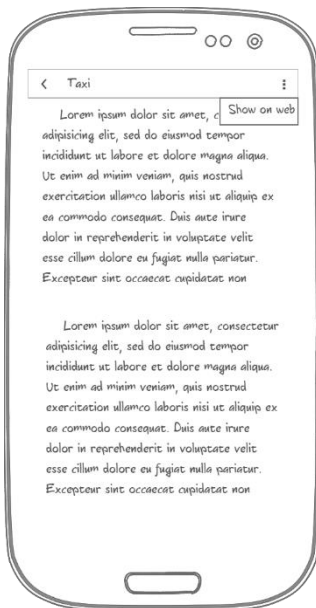


## 6.4 Practical information

List of all practical articles

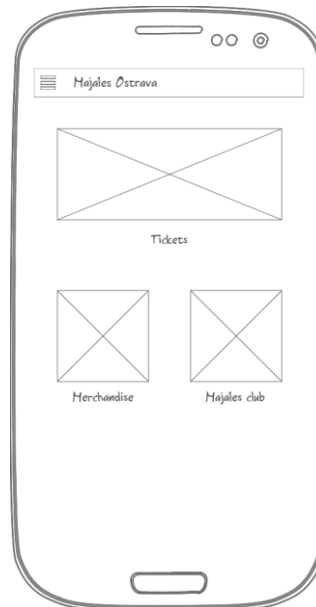


Detail of practical article



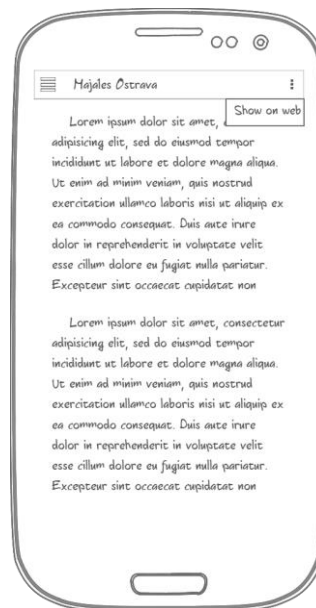
## Majáles shop

List of links to e-shop, merchandise and club



## 6.5 Parade

Information about Majáles Parade



## 7 Loading data

All data for the mobile app are the same as data for web page based on WordPress. We just download them from prepared API in GSON format.

GSON is JSON format which has the same structure like models in application and therefore can be easily mapped to them.

## 8 Workload and planning

### 8.1 WebAPI

**3h** – create GSON API

**2h** – test API

### 8.2 Android frontend

**15h** – Main layout with fragments

**8h** - Menu

**5h** – Main screen

**3h** – Main screen when Majáles is running

**6h** – About

**6h** – News list

**4h** – News detail

**20h** – Line-up

**15h** – Custom line-up

**8h** – Areal map

**6h** – Practical list

**4h** – Practical article

**9h** – Supporting program list

**5h** – Majáles shop

**7h** – Parade

### 8.3 Android backend

**25h** - Cache and downloading API

**10h** - Google Cloud messaging

**SUM:** 161h