

INSTITUTE OF INFORMATION TECHNOLOGY

# 3AND - Android Application Development Project

**Document content** 

Subject Delivery

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## **Android Application Development**

**Project** 

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# **Android Application Development**

**Project** 

## 1 CONTEXT

SUPINFO wants to create an application to list cooking recipes and needs you to develop it. Because it needs to be powerful and scalable you naturally choose to use Android Technologies.

SUPINFO wants to create SupCooking.

This project must be done by groups, each containing 3 or 4 students maximum. Working in a bigger group will be sanctioned by penalties points.

## **2 SPECIFICATIONS**

The first version of this application will be composed of several functionalities listed below:

- List cooking recipes
- Login/out
- Add cooking recipes
- Delete cooking recipes
- Search a cooking recipe
- Evaluate cooking recipes



## 2.1 LIST ACTIVITY

The first Activity show a list of last cooking recipes of all users.

A rating bar is present to display the evaluation of each cooking recipes.

By a click on an element of this list you can view the detail of the cooking recipe and this new activity allow you to evaluate the cooking recipe with a rating bar of 5 stars.

This list of last cooking recipes must be saved on database of the Android application to be diplayed if any network is available.

If a network is available this application get the list from the API.

A button must be displayed at bottom to show "My cooking recipes".

## 2.2 My Cooking Recipes Activity

The second activity show a list of my cooking recipes and a button must be displayed at the bottom of this list to add a new cooking recipe.

By a click on an element of this list you can view the detail of the cooking recipe.

You are free to create an adapted menu to switch between the list of "my cooking recipes" and the general cooking recipes.

## 2.3 LOGIN/LOGOUT

To access SUPCooking services, it's necessary to connect a user.

A user is defined by a username, a password, a phone number, last name, first name, postal address and email.

To authenticate a user, use the username and password.

It's necessary to have a login activity on the application at starting if the application doesn't know the username and password of the user.

When authentication is successful, the API of services returns the user in a JSON object.



### 2.4 ADD A COOKING RECIPE

New cooking recipe must be saved in Android database. The user can take a picture from the camera to enhance their cooking recipe.

A cooking recipe is composed by an id, a name, a type (cakes, soup, grill, etc.), a time of cooking, a time of preparation, a list of ingredients, multiples steps of preparation, an evaluation composed by a rating bar of 5 stars and can have a picture.

## 2.5 DELETE A COOKING RECIPE

If the user wants, he can delete a cooking recipe from the list of "my cooking recipes".

## 2.6 SEARCH A COOKING RECIPE

On the top of each list of cooking recipes you must display a form to search a cooking recipe by search in the name, in the step of preparation and the list of ingredients.

### 2.7 EVALUATE A COOKING RECIPE

If the user wants, he can evaluate the general cooking recipes by a click on stars of the rating bar. This new evaluation is send by the API.

### 2.8 API

An online version of the API of test is available at http://supinfo.steve-colinet.fr/supcooking/ It is possible to download the API to have it on your own server.

A user exists to test the functionality of your application.

Username "admin" password "admin"

This API works by HTTP POST or GET.

Three methods are availables:

## To check an user use the "login" action:

#### Parameters:

- action=login
- login= "an username"
- password= "the password"

If successful, returns a json of the user and a state "success" as "true".



If failure, returns a state "success" as "false" in a JSON object.

To add an evaluation on a cooking recipe use the "evaluate" action:

#### Parameters:

- action= evaluate
- login= "an username"
- password= "a password"
- cookingId= "an id"
- rate= "4"

If successful, returns a state "success" as "true" in a JSON object. If failure, returns a state "success" as "false" in a JSON object.

To get the list of last cooking recipes use the "getCooking" action:

#### Parameters:

- action=getCooking
- login= "an username"
- password= "a password"

If successful, returns a state "success" as "true" and the car position in a JSON object. If failure, returns a state "success" as "false" in a JSON object.

You can find examples on http://supinfo.steve-colinet.fr/supcooking/

## 2.9 ORAL EXAM

You are the provider application programming. You must present you work like a meeting. You deliver the report of your work to your client.



## **3 INSTRUCTIONS**

- Plagiarism is forbidden.
- Make accessible his code on a public sharing platform (as GitHub) before the end of the evaluation is forbidden.

Don't abiding by these rules will result in suspension of your assessment and will be considered cheating.

## 4 NOTATION

Functionalities	Points
To start this application the user must be connected by the api	1
If a network is available this application get the list of last recipes from API	1
If any network is available this application get the list of last recipes from Android Database	2
The cooking recipe model is respected	1
It's easy to switch betwen general cooking recipes and "My cooking recipes"	1
The user can evaluate a general cooking recipe	2
The user can add a cooking recipe in "my cooking recipes"	1
The new cooking recipe can take a picture from camera	2
The user can delete a cooking recipe from "my cooking recipes"	1
The user can search a cooking recipe	2
Oral exam	5
Application Design	2
Code Quality & Conventions	1
TOTAL	22/20

## **5 RETURN**

Return your graded exercise as a ZIP. Not following this convention will result in point loss.

You will send the archive **before the end of evaluation**. After that delay, your graded exercise **will not be corrected and the mark 0 will be assigned to you**.

