

SMART POUR USER MANUAL

THIRD YEAR UNIFIED PROJECT

TEAM

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1. Introduction

Smart Pour is a fully automated coffee machine designed for solo or group use. Carefully designed to overcome the downsides of conventional coffee making, this system helps clients improve efficiency and profitability with minimal involvement of labor.

The system consists of two main components; a mobile application to place orders online and track ingredient availability and schedules, favorite recipes, and the Automated Hardware Node (Coffee Machine) .

This Coffee machine is power efficient, easy to use and Fast. The machine can connect to home Wifis and any kind of internet connection. The Coffee machine is powered by NodeMCU which uses a ESP8266 module.

2. Content of the Package

The package you bought should contain the following items,

- 1 smart coffee machine
- 2 5V power supply- Power Pack Type (2A)
- 1 Device ID (See behind the device)
- 1 user manual (this manual)

3. Components of the Smart Pour



Figure 1 :
Upper view of the device



Figure 2 : Side View of the device

4. Features

- Ability to Schedule coffee making according to user's need
- Ingredient tracking mechanism
- The coffee making can be customized according to user's preference

- User friendly controller mobile application to control all operations of the system.
- Emergency manual control switch.
- A management system to keep track of the devices, users, schedules and ingredients

5. Quick Start up

This section explains the quick start up guide to setup and test the main functionalities of the system.

5.1 Mobile Application

- a. Download the smart pour mobile application via play store
- b. Sign up
- c. Login
- d. Register the device, using the device id (See behind the device)

5.2 Device

- a. Fill the ingredients in relevant places.(See above figure)
- b. Place a water supply. (See above figure)
- c. Supply power to the two 5V power supplies.
- d. They will get connected to the wifi router automatically

6. Device Installation

6.1 Power requirement

The device requires to be powered using two 5v 2A (minimum) power supply. The power supply (5v 2.5A) is used to power up the microprocessor, but any other power supply that fulfills the condition would suffice. The other 5V power supply is used to power up the heater for the boiling purpose.

7 . Using the mobile application

The device communicates with the database and the mobile application providing real time data. In order to facilitate this the user must sign up and the device must be registered.

1. Download the mobile application.
2. Signup by providing user name, email and password. (If you haven't created an account already)
3. Login using user name and password.

7.1 Registering device

Device registration requires a unique device ID and an access token which is used to authenticate the device. (Note that the access token cannot be changed (for security reasons), therefore if forgotten the device must be removed and registered back again).

1. Go to Add devices menu under Devices.
2. Enter Device ID (unique) and access token.
3. Click Register.

To ensure that the device has been registered go to the Device list menu under devices.

7.2 Delete device

1. Go to Device list menu under Devices.
2. Click delete button next to the device.
3. Click Ok to confirm.

To ensure that the device has been deleted go to Device list menu under devices.

7.3 Adding Schedules

Here coffee making can be scheduled or ask for a coffee at this instant.

1. Go to the Home Page and Select 'Schedule now' page.
2. Select the default recipe or a customized recipe.
3. Select a date
4. Select a time

5. Click Done to confirm.

7.4 View Ingredient Availability

Here available ingredients can be viewed.

Go to the Home Page and Select 'Ingredients' page.

Ingredients available are viewed as,

1. Currently available
2. Available amount after reservation

7.5 View upcoming schedules

Go to the Home Page and Select 'Upcomings' page.

Here, the recipe, device, user, date, time is shown

7.6 View favourite recipes and Add new recipes

Go to the Home Page and Select 'Favourite' page.

Here, the currently saved recipes are shown. As well as can add new recipes.

1. Go to 'Add a new recipe'
2. Give a Title to the recipe
3. Add the amount of sugar.
4. Add the amount of coffee.

8. Maintenance of your Smart Pour

- Make sure to clean the inner parts of the coffee machine regularly
- Make sure that sensors are clean.
- Oil the motor springs when needed
- Do not put the machine where it has too much humidity

9. Screenshots



Figure 3 -
Sign up or login page

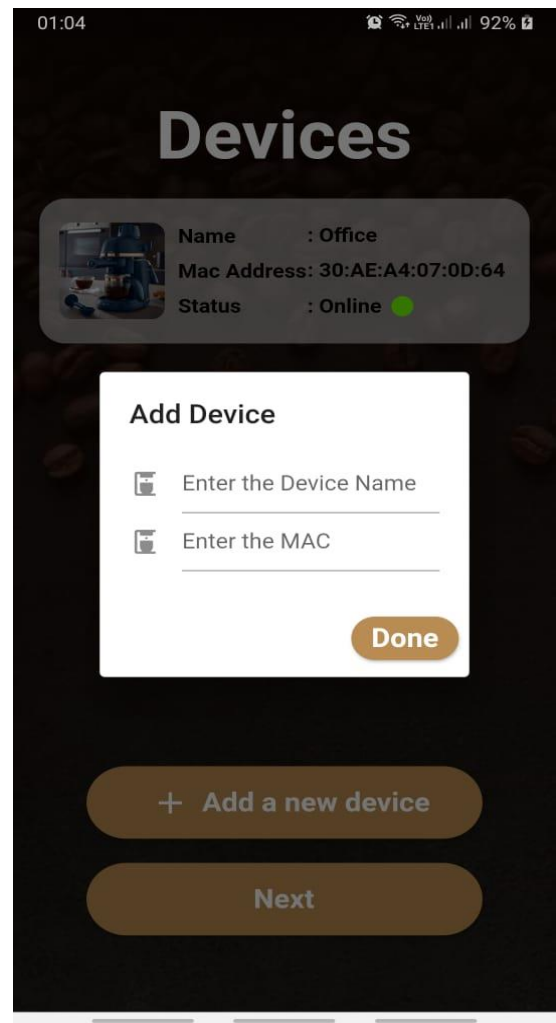
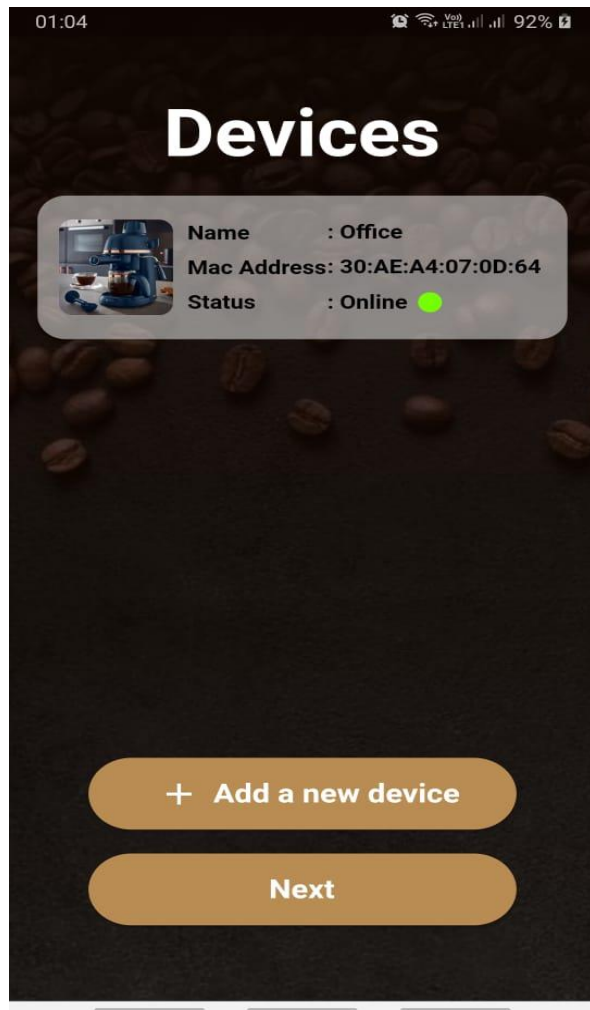


Figure 4,5 - Adding Devices

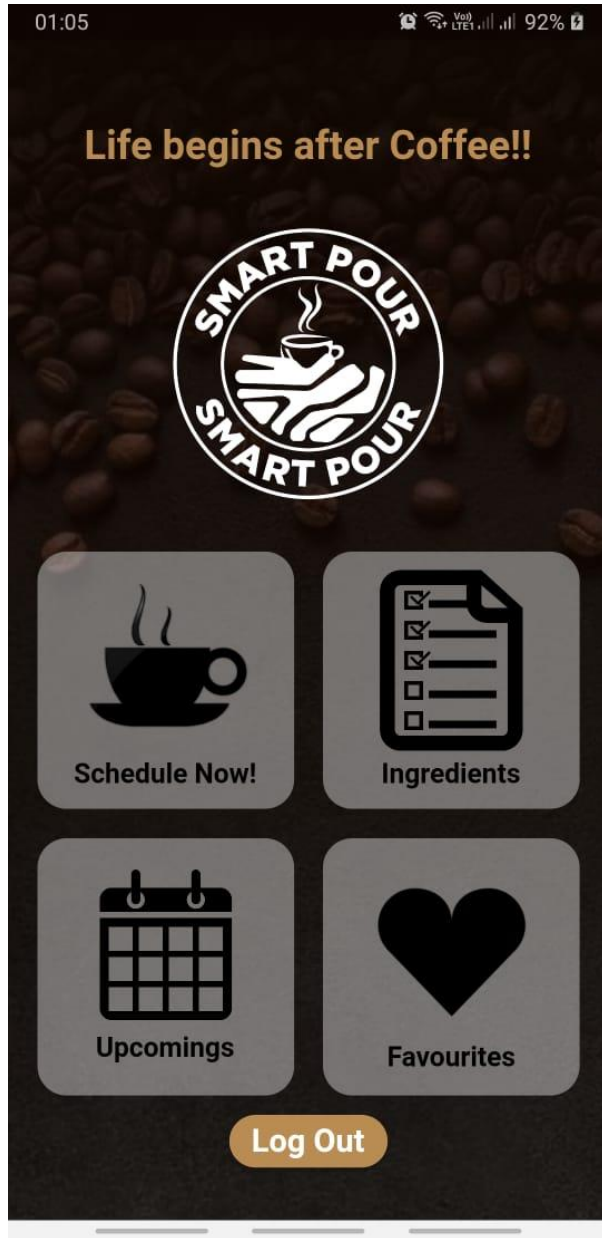


Figure 6 - Home Page

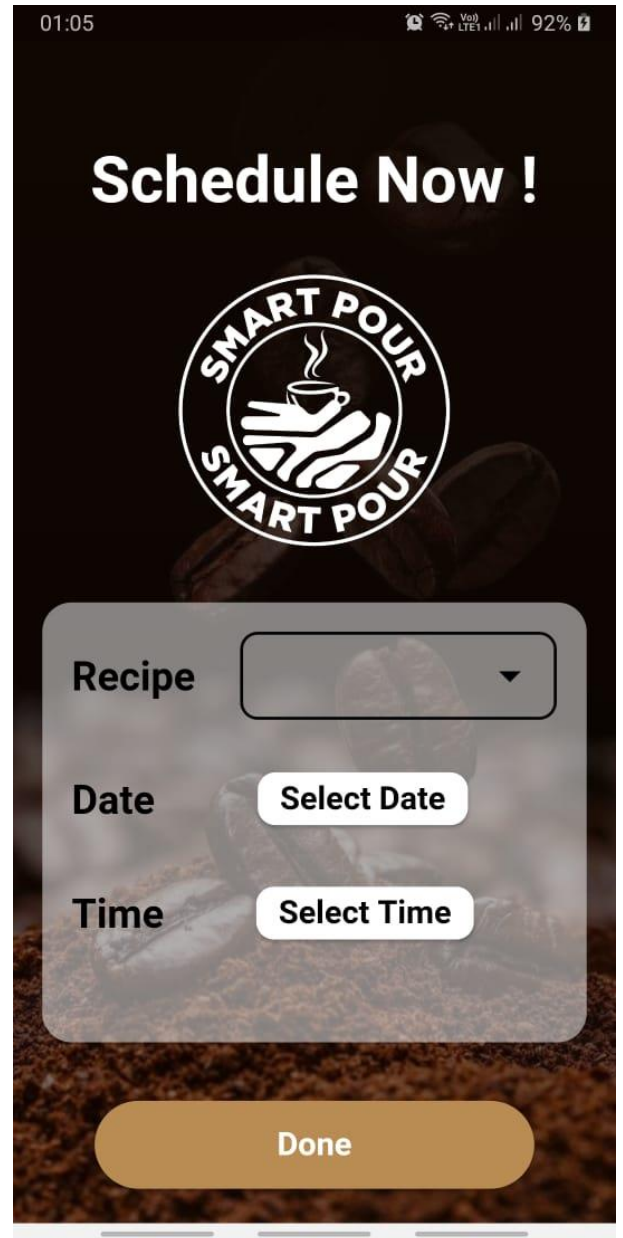


Figure 7 - Add recipes

Figure 8 - Favourite recipes

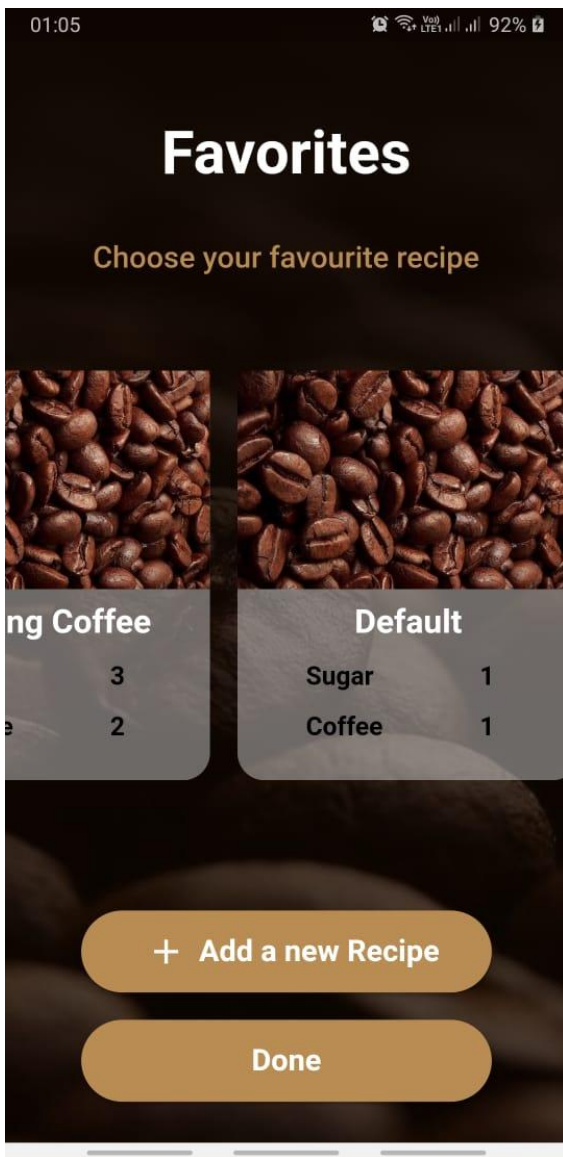
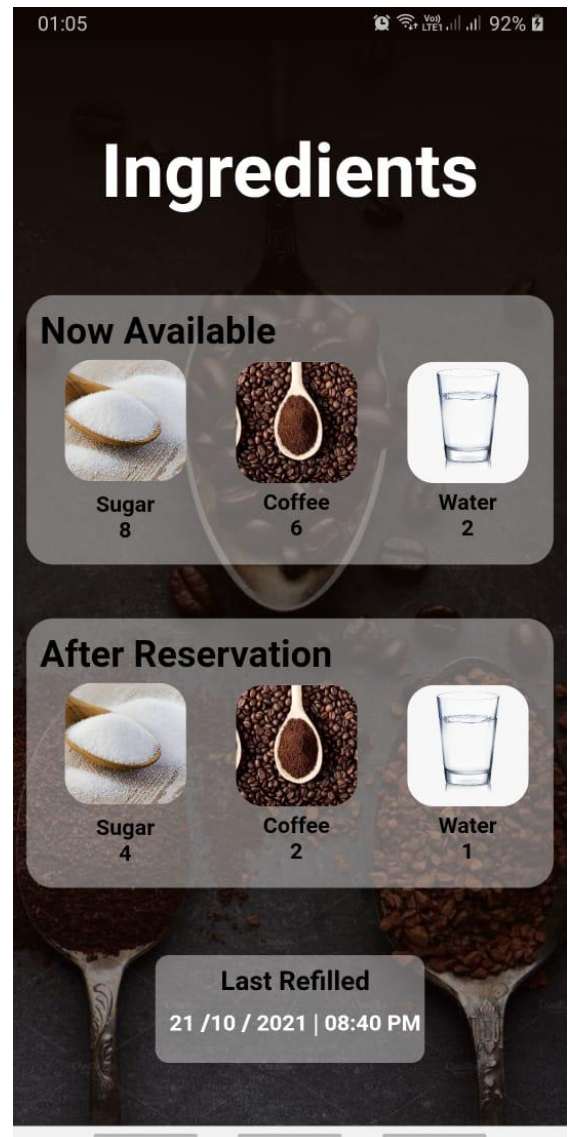


Figure 9 - Available Ingredients



END