

# SETUP DOCUMENT Mysteryland

Dilyana Stoeva – 3416046 Nikolay Nikolaev – 3235106

Putri Aulia Salsabila – 3379337

Viktoria Admasu – 3235904

Course: ProP

Group: 04

Date: 12.03.2018

Version: v3

Last revision: 13.04.2018

# TABLE OF CONTENTS

1.	AGREEMENT	3
2.	PROCESSES	5
3.	FUNCTIONAL REQUIREMENTS	9
4.	GUI	14
5.	WEBSITE WIREFRAME	23
ß	FDN	25

# **AGREEMENT**

This agreement states the terms and conditions that govern the contractual agreement between Developer Softonica and Client Paval Roxana, who agrees to be bound by this agreement.

Whereas the client has requested software to organize her event, which is described in further detail on *Exhibit A*, and Softonica is developer with whom the client has come to an agreement to develop software.

Therefore, in consideration of the mutual promises made by both parties to this agreement, the developer and the client covenant and agree as follows:

#### 1. DEVELOPER'S DUTIES.

- a) The Developer shall deliver the product to the Client by June (the "Delivery Date").
- b) The Developer agrees to respond to any request made by Client regarding the software.
- 2. **SERVICES AND PAYMENT.** Developer agrees to undertake and complete the software (as defined in Exhibit A) in accordance with and on the schedule specified in Exhibit A.
  - a) Payment will be paid after all of the software is delivered.
  - b) Invoices will be issued at the end of each Billing Period and due 30 days later.
- 3. **OWNERSHIP.** The Client retains all right, title, and interest to software.
  - a) The Developer grants the Client a non-expiring, royalty-free, non-exclusive license to use, reproduce, modify, display, and distribute (except where prohibited by law) the software.
- 4. **WARRANTY.** Developer warrants that the services will be performed in a professional and workmanlike manner and that none of such services or any part of this Agreement is or will be inconsistent with any obligation Developer may have to others.

- 5. **Termination**. Either party may/may not terminate the contract at any time through written request.
- 6. **NOTICE.** All notices under this Agreement shall be in writing.
- 7. **MISCELLANEOUS.** No changes or modifications or waivers to this Agreement will be effective unless in writing and signed by both parties.

Developer Client

#### Exhibit A

#### **SOFTWARE SPECIFICATIONS**

- The application for entering and leaving the event,
- Different application for registering.

This agreement has been signed by the parties.

- Check-in application is a mobile app.
- Mobile version of the map for inside the festival.
- Option for searching for products to buy through the application.
- Artists get managing application by mobile app.

# **PROCESSES**

1. Name: Top up balance on the website

Primary actor: Account holder

Normal flow:

- a) The user logins or registers on the website
- b) The user chooses to top up the balance of their account
- c) The user enters an amount of top-up, their payments details and clicks on the payment button
- d) The website validates the transaction and shows if the transaction is successful or not
- 2. Name: Register on the website

Primary actor: Account holder

Normal flow:

- a) The user goes to the register page
- b) The user fills in their details such as name, address, telephone number, etc. and clicks on the register button
- c) The website validates the user details and redirects to the user's account if the registration is successful, otherwise it shows an appropriate error
- 3. Name: Login on the website

Primary actor: Account holder

Normal flow:

- a) The user goes to the login page
- b) The user fills in their username/email and password and clicks on the login button
- c) The website validates the user details and redirects to the user's account if the login is successful, otherwise it shows an appropriate error
- **4. Name:** Buying tickets for the event on the website

**Primary actor:** Account holder

#### Normal flow:

- a) User clicks on "Buy tickets" button in the menu
- b) System will be redirect to login page.
- c) User login to their account.
- d) System validates the account.
- e) User choose their ticket (how many).
- f) User choose their camping ticket (optional).
- g) User top up her/his balance.
- h) User click payment button.
- i) System redirect to payment page.
- j) User pay the ticket and balance.
- k) System validates the transaction and redirect to website account with succeed payment.
- **5. Name:** Check in the event or camping site

**Primary actor:** Employee

Normal flow:

- a) User scan the identification number.
- b) System validates the number and update the status to checked in.
- c) The visitor checked in.
- **6. Name:** Check out the event or camping site

**Primary actor:** Employee

Normal flow:

- a) User scan the identification number.
- b) System validates the number and update the status to checked out.
- c) The visitor checked out.
- **7. Name:** Buy product from the shop

**Primary actor:** Account holder

Normal flow:

- a) User open the application in her/his mobile phone.
- b) System opens the application.
- c) User fill her/his details information, such as username/email and password.

- d) System validates the account and logged in.
- e) User choose product and click payment button.
- f) System regenerate to the payment page.
- g) User pay the product.
- h) System redirect to the application and show the history of payment.
- **8. Name:** Check the product which bought by visitor

**Primary actor:** Employee

Normal flow:

- a) User open the application.
- b) System opens the application.
- c) User fill the details information, such as shop number id and password.
- d) System validates the account.
- e) User logged in to her/her account.
- f) Click the order history and see the details by order number.
- **9. Name:** Check the loan product

**Primary actor:** Employee

Normal flow:

- a) User open the application.
- b) System opens the application.
- c) Click the product and fill the number the visitor borrow.
- d) System check the validity and update the product.
- 10. Name: Check status and overview of the event

**Primary actor:** Employee

Normal flow:

- a) User open the application.
- b) System opens the application and load the information.
- 11. Name: Check performance schedule and equipment

**Primary actor:** Account holder

#### Normal flow:

- a) User opens the application.
- b) System opens the application.
- c) User fill her/his details information, such as performance id and password.
- d) System validates the account.
- e) User go to her/his account.
- f) User check her/his schedule or equipment.
- g) System load the request.
- h) The schedule or equipment showed.

# **FUNCTIONAL REQUIREMENTS**

#### 1. Website

#### Must have:

- a) A homepage with explanation about the event.
- b) Copyright on the footer.
- c) Ability to purchase tickets of the event.
- d) Ability to purchase the camping ticket separated by ticket of the event.

- e) Contact us feature.
- f) Login and register feature.
- g) It should be possible for the visitors to deposit money into their event account.
- h) Account page after login.

#### Should have:

- a) Like and share feature.
- b) Frequently Asked Questions feature.
- c) The address of the location of the event and google maps feature.

#### Could have:

- a) Search feature.
- b) The images of the previous event.

#### Won't have:

- a) Email subscription.
- b) The video of the event.

## 2. Application for entrance and exiting the event

#### Must have:

- a) Check the balance of the user's event-account and return the money before the visitors leave.
- b) Check if the visitor has loaned materials to return before they leave.
- c) Make visitor's account checked in and checked out.
- d) Check the visitor's identification number.
- e) Check the visitor's validation ticket, visitor can't use the ticket for check in twice (for security reason).
- f) Ability to purchase the ticket at the entrance with additional fee from the website.

#### Should have:

- a) Time and date when the visitor checked in and checked out.
- b) Logo of the event.

#### Could have:

a) The details information of visitors.

#### Won't have:

a) Search feature.

#### 3. Application for entrance and exiting the camping

#### Must have:

- a) Make visitor's account checked in and checked out.
- b) Check the visitor's identification number.
- c) Ability to buy the ticket if there is an empty spot left with additional fee from the website.

#### Should have:

- a) Time and date when the visitor checked in and checked out.
- b) Logo of the event.

#### Could have:

a) The details information of visitors.

#### Won't have:

a) Search feature.

## 4. Application for shops

#### Must have:

- a) Scanning a visitor's identification number.
- b) Scanning a product barcode.
- c) Manually entering of the visitor ID.
- d) Searching for a product by barcode or name and adding to the bill.
- e) Checking if a product is available for selling.
- f) Removing an item from the list.
- g) Clearing the items list after payment.
- h) Generating a receipt.
- i) Feature to send digital invoice to the customer.
- j) Ability to refund balance to customer account.
- k) Ability to change the price of the products.
- I) Feature for payment by card (for customer who is not buy from mobile application).

#### **Should have:**

- a) History of previous invoices.
- b) Function to rollback a transaction.

#### Could have:

- a) A shortcut button to switch to previous bill.
- b) History of invoices for a particular visitor.

#### Won't have:

\_

#### 5. Application for loaning materials

#### Must have:

- a) Scanning a visitor's identification number.
- b) Scanning a product barcode.
- c) Manually entering of the visitor ID.
- d) Searching for a product by barcode or name and adding to the bill.
- e) Removing an item from the list.
- f) Clearing the items list after payment.
- g) Feature to check if product is available for loaning.
- h) Feature to loan and return a product.
- i) Generating a receipt.
- j) Feature to send digital invoice to the customer.
- k) Generating a deposit amount in invoice.
- I) Ability to return the deposit after the customer return the loan material.

#### **Should have:**

- a) History of previous invoices.
- b) Function to rollback a transaction.
- c) Filtering items by type (added to list, loaned, returned).

#### Could have:

- a) A shortcut button to switch to previous bill.
- b) History of invoices for a particular visitor.

#### Won't have:

\_

## 6. Mobile application for shop

#### Must have:

- a) Login feature.
- b) Add to cart feature.
- c) List of products.

- d) Update cart feature (after adding a product).
- e) Remove product feature.
- f) Payment feature (by reducing balance from the visitor's account).

#### Should have:

- a) The details information of visitors.
- b) Order history.
- c) Logo of the event

#### Could have:

a) Add to wishlist feature.

#### Won't have:

- a) Delivery feature.
- b) Save or print invoice feature.

### 7. Event status overview application

#### Must have:

- a) Visitors present at the event.
- b) Total visitors of the event.
- c) Total balance of all visitors and total spent money.
- d) Camping statistics (booked, free and total amount of spots).
- e) Total income per shop.
- f) Total income for all the shops.
- g) Total amount of a certain product sold.

#### Should have:

- a) Search visitor feature.
- b) Option to show the visitor's information.

#### Could have:

a) Reset button.

#### Won't have:

a) -

## 8. Application for performer's schedule and equipment

#### Must have:

- a) Login feature.
- b) List of performer's schedule.
- c) List of performer's equipment.

#### **Should have:**

a) Map of the location.

#### Could have:

a) -

#### Won't have:

a) The details information of performer.

# 9. Application for converting ATM Logs

#### Must have:

d) Option to process unprocessed logs

#### **Should have:**

b) -

#### Could have:

b) -

#### Won't have:

b) -

# GUI

## Mobile shop application



#### Figure 5.1 - Login interface

After starting the application, the user will need to login with email and password. Then on the screen lists with all products and shops will be shown.

## Check-in/Check-out application

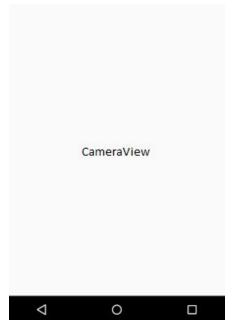


Figure 6.1 - Camera/Scanning interface

The interface will be similar to the one mentioned above (*Figure 5.1*). Instead of logo, input fields and a button, there will be a CameraView which will show what the user is scanning. In *Figure 6.1* it is blank because it works properly only when the application is launched on an Android device with camera.

# Application for food and drink stands



Figure 1.1 - Login screen

This it the login screen of the application, to login the assistant has to select their

shop and enter their assistant ID and password for the shop.

After clicking on the "Login" button the main interface (from figure 2.2) will be loaded if the login is successful, otherwise an error will be displayed.

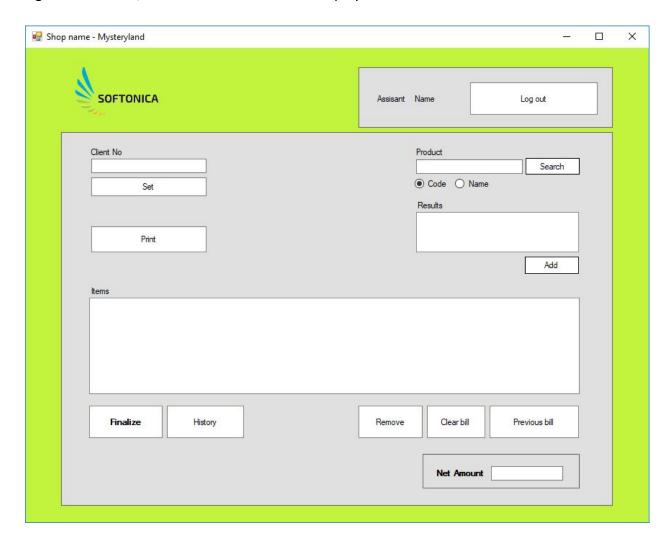


Figure 1.2 - Main interface

This is the main interface of the program. There is going to be an option for the shop assistants to set manually the Client No of the billed visitor. The application is going to have history of the bills, options for searching for an item (figure 1.3), finalizing the bill, removing an item from the bill, clearing all the items in the bill and a shortcut option to go directly to the previous order.

Clicking on the "Finalize" button will submit the order and display in a message box whether it was successful or not as well as details about the amount of the invoice. After clicking the OK button, there will be a dialog box asking if the invoice should be printed.

Clicking on the "History" button will open a new form (figure 1.3) for invoice searching.

Clicking on the "Remove" button remove the item from the list if the bill has not been submitted yet.

Clicking on the "Clear bill" button will clear the list of the product items.

Clicking on the "Previous bill" button will load the form from figure 1.3 with the previous invoice loaded.

Clicking on the "Print" button prints the invoice again.

The name of the currently logged assistant is displayed in the top and there is an option to log out from the application and login as another assistant.

There is a search box for product search. It will be possible to search by either product code or name and add a found product to the items list.



Figure 1.3 - Search screen

The search screen has a list of the most recent invoices to directly choose from with a double click and a search box for searching for invoices by Invoice No. Below in the items list the items and their details will be displayed. There are two options for refund - to refund the amount of the whole bill or of the selected items. There is also an option to print again the invoice. In the bottom right side the net amount of the invoice is shown. Below there are details about the client, date and invoice No. The <Name> placeholder will contain the name of the client, the <Client No> - the client number, the <Date> - the date and <No> the invoice No.

## Application for stands, where visitors can loan materials



Figure 2.1 - Login screen

The login screen is analogous to the one of the food and drink stands application.

After the assistent has inputted their id and password, selected their loan stand from the list and clicked on the "Login" button the main interface (from figure 2.2) will be loaded if the login is successful, otherwise an error will be displayed.

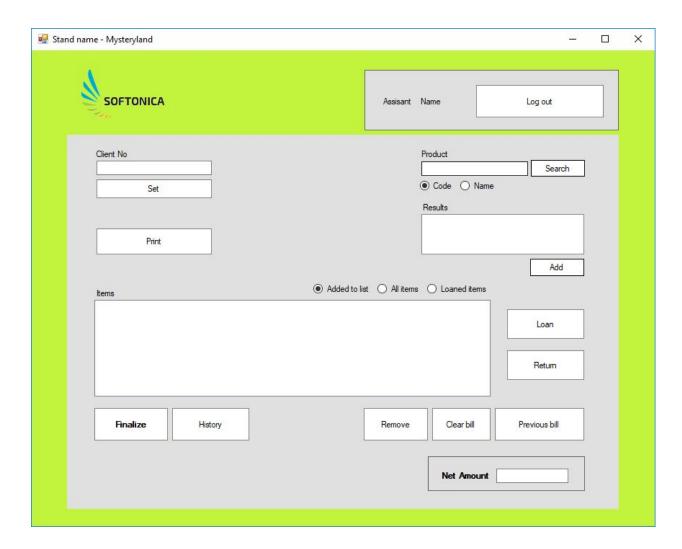


Figure 2.2 - Main interface

This is the main interface of the program. There is going to be an option to set manually the Client No of the billed visitor. The application is going to have history of the bills, options for searching for an item (figure 2.3), finalizing the bill, remove an item from the bill, loan or return an item, clearing all the items in the bill and a shortcut option to go directly to the previous order as well as option to filter for the shown results (added to list, all items, loaned items).

Clicking on the "Finalize" button will submit the order and display in a message box whether it was successful or not as well as details about the amount of the invoice. After clicking the OK button, there will be a dialog box asking if the invoice should be printed.

Clicking on the "History" button will open a new form (figure 2.3) for invoice searching.

Clicking on the "Remove" button remove the item from the list if the bill has not been submitted yet.

Clicking on the "Clear bill" button will clear the list of the product items.

Clicking on the "Previous bill" button will load the form from figure 2.3 with the previous invoice loaded.

Clicking on the "Print" button prints the invoice again.

Clicking the "Loan" and "Return" buttons mark the selected items loaned or returned respectively for the current client.

The name of the currently logged assistant is displayed in the top and there is an option to log out from the application and login as another assistant.



Figure 2.3 - Search screen

The search screen has a list of the most recent invoices to directly choose from with a double click and a search box for searching for invoices by Invoice No. Below in the items list the items and their details will be displayed. There are two options for refund - to refund the amount of the whole bill or of the selected items. There is also an option to print again the invoice. In the bottom right side the net amount of the invoice is shown. Below there are details about the client, date and invoice No. The <Name> placeholder will contain the name of the client, the <Client No> - the client number, the <Date> - the date and <No> the invoice No.

#### **Event status overview application**



Figure 3.1 - Main interface

This is the main interface of the program. It provides a clear view of the total number of visitors, the presented visitors, statistics for the booked and free camping spots, the total spent balance on the event by the visitors and the total balance of all the visitor accounts together as well as a list with the latest visitors and options to show their info and search for a visitor (figure 3.2). There is also table representation of the total amount of money and amount of a certain product sold per shop. Hovering the presented visitors count displays the other counts about visitors, hovering booked spots - about camping spots, and hovering total balance - about the visitors balance respectively. Clicking on the "Show info" button will show the information about the visitors in a new form (figure 3.2). Double clicking on a visitor entry in the "Latest visitors" list is equivalent to clicking on the "Show info" button. Clicking on the "Search for visitor" button will open the search form (shown on figure 3.3).



Figure 3.2 - Visitor info

This form is going to show the visitor status and info about the visitor.



Figure 3.3 - Visitor search

This form is going to be used for searching for a visitor by their Visitor No or name as well as showing the status and info of the selected visitor (figure 3.2).

The employee has to input the search terms in the visitor input field and choose the type of search (whether it is by visitor No or name). After clicking on the search button the returned results are displayed in the

results list box. Clicking on the "Show info" button shows the visitor info as displayed in figure 3.2.

#### **ATM Log Converter**

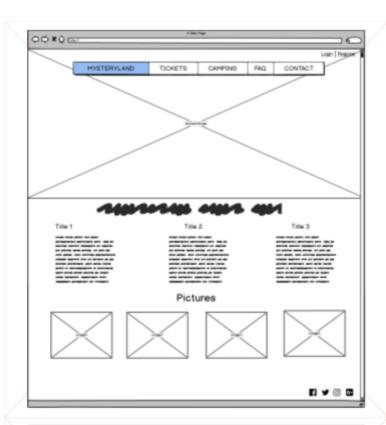


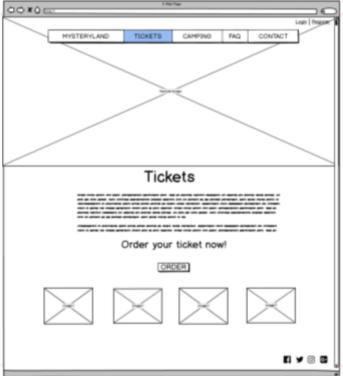
Figure 4.1 - Main interface

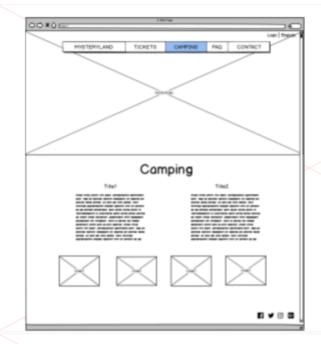
The GUI of the application for converting ATM logs is really simple. There is only one option - to convert the logs to a format readable by the other applications used for the event.

# WEBSITE WIREFRAME

Mysteryland has a website to provide information about the event. In order to make the website more appealing, we are going to use pictures as the base of the design. So, every page has an image of the event located on top of all pages. You can order your ticket for the event with or without the camping site ticket directly from the website. We also describe all details for the event in the homepage and we provide a lot of pictures with it. Moreover, to order, you need to register or log in through the website. We also have another feature-share the website through social media, which is located in the footer.





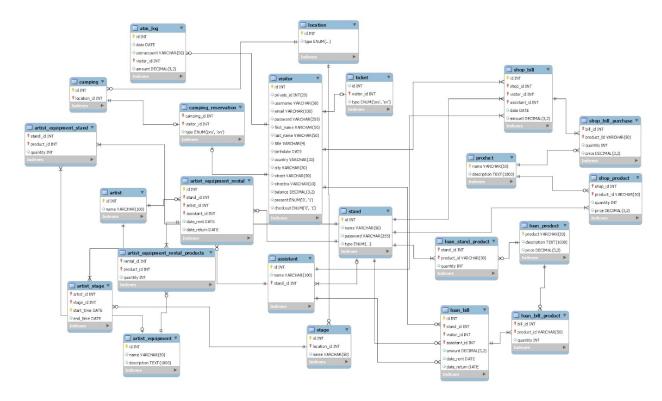








# **ERD**



The table "visitor" contains all the data of the visitors

The table "ticket" contains the ticket id, the id of the visitor event account and the type of the ticket bought before the event or on the event

The table "locations" contains the location id and the type of the location

The table "stand" contains the stand id, the name, password and type of stand - food and drink stand, stand for loaning materials and stand for loaning artist equipment

The table "assistant" contains the assistant ids, names and the stands they are working at

The table "artist\_equipment\_rental" contains the rentals of equipment

The table "artist\_equipment\_rental\_products" contains the products of the rentals and their quantity

The table "artist" contains the ids and the names of the artists

The table "artist\_equipment" contains product details - their name and description

The table "artist\_stage" contains the schedule for the artists - the stages, the artists and the start and end times

The table "artist\_equpment\_stand" contains the quantities of each product per shop

The table "stage" contains the stages - their id, name and location

The table "camping" contains the id of the camping and its location

The table "camping\_reservation" contains the reservations and when the tickets are bought - before the event or on the event

The table "loan\_bill" contains the bills - their id, the stand, visitor, assistant, amount, and rent date and return date

The table "loan\_product" contains the products for loan, their description and price

The table "loan\_bill\_product" contains the products in the bills and their quantity

The table "loan\_stand\_product" contains the quantities of each product per stand

The table "product" contains the shop products and their descriptions

The table "shop\_bill" contains the bills for the shops - their id, shop, visitor, assistant, date and amount

The table "shop\_bill\_purchase" contains the products in the bills, their quantity and price

The table "shop\_procuts" contains all products per shop and their quantity and price

The table "atm\_log" contains the transaction id, the date, the user bank account, the visitor account and the amount of the transaction

#### Notes:

The equipment items, food and drink stand items and items for loan are in separate tables.

We assume that the product prices in the shops may be different and they may change over time, while for the stand for loaning materials we assume that the product prices will be the same for all shops.

We assume that there won't be a cost for artist equipment rental.

We assume that the VAT will remain the same during the festival.

We assume that shop assistant work in only one stand during the festival.

We assume that the loans end at the end of the festival and that there is only one rental time and price for loaning a particular product

We assume that all stages have names.