# Z 7layers



#### Version: 3

- **Date**: 30-03-2019

- Tutor: Mikaeil Shaghelani Lor

- Client: Emin Thaqi

- Group members: Mohamad Wissam Alhamwi – Dimitrije Guteša- Radu Pavel-

Borislav Pavlov

## **Version History**

The following table provides information about the development of the Setup Document, including the main changes in the Setup Document (adding and editing information) and the dates for the approval of this information:

| ID & Version # | Prepared by     | Revision Date | Approved                  | Actions   |
|----------------|-----------------|---------------|---------------------------|---|
| 1.0            | Borislav Pavlov | 12.03.2019    | Mikaeil<br>Shaghelani Lor | Added GUIs for half of the applications, wireframes of the website, site map, visual design of some of the pages, ERD diagram picture. Made suggestions for the agreements with the client and the functional requirements for the applications in MoSCoW model |
| 1.1            | Borislav Pavlov | 17.03.2019    | Mikaeil<br>Shaghelani Lor | Changed - GUIs,<br>ERD Diagram and<br>the format of the<br>tables. Also added<br>Use Cases  |
| 1.2            | Borislav Pavlov | 30.03.2019    |                           | Changed - GUIs  |

## Contents

| version history                  | 2  |
|----------------------------------|----|
| Contents                         | 3  |
| 1 Agreements with the Client     | 4  |
| 2 Processes                      | 9  |
| 2.1 Flow Chart                   | 9  |
| 3 Functional Requirements        | 9  |
| 4 GUIs                           | 13 |
| 4.1 Check In and Out Application | 13 |
| 4.2 Camping Application          | 13 |
| 4.3 Shop Application             | 13 |
| 4.4 Loan Stand Application       | 13 |
| 4.5 ATM Stand Application        | 13 |
| 4.6 ATM Log Reader Application   | 13 |
| 4.7 Admin Panel                  |    |
| 5 Website Wireframe              | 14 |
| 5.1 Visual Design and Site Map   | 28 |
| 6 ERD                            | 32 |
|                                  |    |

# 1 Agreements with the Client

#### From the team side:

The client has hired the team to create a software solution for managing events.

The deliverables of the team can be seen in Table 1 below:

| Features (MoSCoW method) |  |  |
|--------------------------|--|--|
|                          |  |  |
|                          |  |  |

| The deliverable                         | Purpose   | Features (MoSCoW method)   |
|---|---|--|
| Application 2: Check in/out application | Checking visitors in and out of the event and camping | <ul> <li>* Must have:</li> <li>* Visitor check-in</li> <li>&gt; Check if he has paid</li> <li>* Sell tickets</li> <li>* Visitor check-out</li> <li>&gt; Check account balance</li> <li>&gt; Check loaned materials</li> <li>* Camping check-in:</li> <li>&gt; Check if group has paid</li> <li>&gt; Sell camping:</li> <li>ticket if not with additional fee</li> <li>* Should have:</li> <li>&gt; Security password</li> <li>* Won't have:</li> <li>&gt; User Manual</li> </ul> |

| The deliverable                 | Purpose  | Features (MoSCoW method)   |
|---------------------------------|--|--|
| Application 3: Shop application | Supporting the shops<br>(food/drinks/souvenirs)<br>and the loan stands | <ul> <li>Must have:         <ul> <li>Visitor uses RFID Chip to pay and also can use user ID</li> </ul> </li> <li>Should have:         <ul> <li>Generating receipt for visitor</li> </ul> </li> <li>Could have:         <ul> <li>Security password</li> </ul> </li> <li>Won't have:         <ul> <li>User manual</li> </ul> </li> </ul> |

|                            |  | Features   |
|----------------------------|--|--|
| The deliverable            | Purpose  | (MoSCoW method)  |
| Application 4: Admin Panel | Allow getting a clear status overview of the event | <ul> <li>Must have:         <ul> <li>Camping statistics (booked and free spots)</li> <li>Visitor status and history</li> <li>Amount visitors present</li> <li>Amount visitors that visit the event</li> </ul> </li> <li>Should have:         <ul> <li>Overview balance of all visitors</li> <li>Total amount gathered from stands</li> </ul> </li> <li>Could have:         <ul> <li>Total amount of certain product sold</li> <li>Security password</li> </ul> </li> <li>Won't have:         <ul> <li>User manual</li> </ul> </li> </ul> |

| The deliverable                      | Purpose   | Features (MoSCoW method)  |
|--------------------------------------|---|---|
| Application 5: ATM stand application | Supporting the ATM stands working with the client balance | <ul> <li>Must have:         <ul> <li>Visitor depositing money on account</li> </ul> </li> <li>Should have:         <ul> <li>Log files with information about deposits</li> </ul> </li> <li>Could have:         <ul> <li>Won't have:</li> <li>Withdrawing money from account before visitor leaves the event</li> <li>User manual</li> </ul> </li> </ul> |

| The deliverable                    | Purpose  | Features (MoSCoW method)  |
|------------------------------------|--|---|
| Application 6: ATM Log application | Update the event account of the visitors according to the log file | <ul> <li>Must have:</li> <li>Should have</li> <li>Optimal way to update the database</li> <li>Could have:</li> <li>Would have:</li> </ul> |

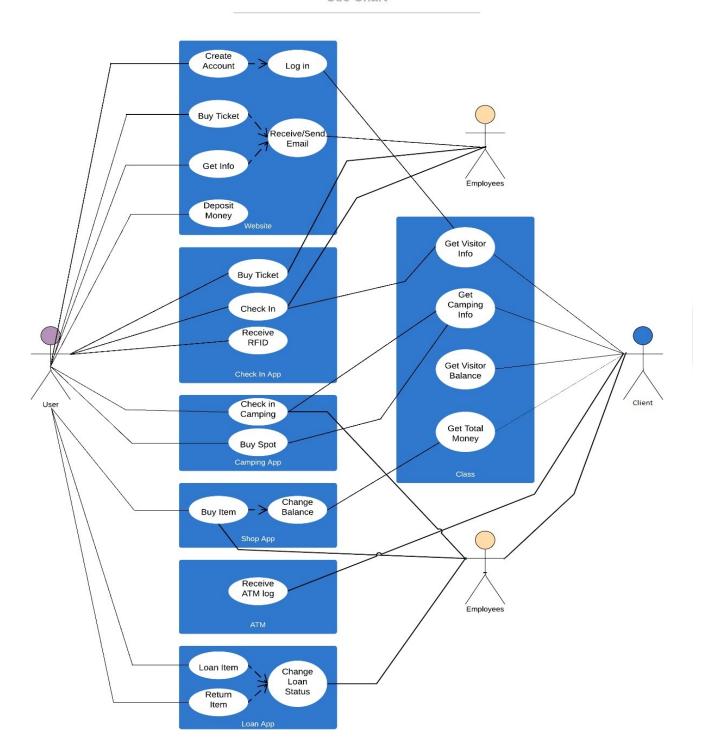
| The deliverable | Purpose   | Features (MoSCoW method)  |
|-----------------|---|---|
| Database        | Supporting all the applications and the website | <ul> <li>Must have:</li> <li>Optimized database</li> <li>Should have:</li> <li>Covers all the requirements</li> <li>Could have: —</li> <li>Won't have: —</li> </ul> |

| The deliverable            | Purpose   | Features (MoSCoW method)   |
|----------------------------|---|--|
| Process flow documentation | Showing all the steps to perform specific tasks in the applications | <ul> <li>Must have:         <ul> <li>Clear graphical view on all the step the visitor can take to perform actions in the applications</li> <li>Should have: —</li> <li>Could have: —</li> <li>Won't have:</li> </ul> </li> </ul> |

## 2 Processes

#### 2.1 Use Case Chart

# Software Solution for Music Festival Use Chart



# **3 Functional Requirements**

In the table below all the deliverables are listed in the column Application, and the functional requirements to the deliverables are sorted using the MoSCoW method.

| Application | Must Have  | Should have  | Could have  | Won't have |
|-------------|--|--|---|------------|
| Website     | <ul> <li>Customer         registration (giving the customer         unique ID number and BARCODE         which will be used for getting in         the Event)</li> <li>Information about the event</li> <li>Ticket purchasing</li> <li>Camping spot         reservation for groups (max 6 people)</li> <li>Deposit money in account after         ticket purchasing</li> </ul> | <ul><li>Admin page</li><li>Responsive design</li></ul> | <ul> <li>Separate mobile app</li> <li>User review page</li> </ul> |            |

| Application  | Must Have   | Should have | Could have           | Won't have  |
|--|---|-------------|----------------------|-------------|
| Application that checks visitors in and out of the event | <ul> <li>Check if the user is allowed to enter</li> <li>Sell tickets on entrance with increased price When visitor leaves, check the balance of his account and loaned materials</li> <li>When visitor leaves, mark his account as invalid</li> </ul> |             | Security<br>password | User manual |

| Application  | Must Have  | Should have | Could have           | Won't have  |
|--|--|-------------|----------------------|-------------|
| Application that checks visitors in and out of the camping | <ul> <li>Check if the user is allowed to enter</li> <li>Check if the user has purchased a ticket</li> <li>If user didn't pay for the spot, he can pay with additional fee</li> </ul> |             | Security<br>password | User manual |

| Application                         | Must Have                                     | Should have  | Could have        | Won't have   |
|-------------------------------------|---|--|-------------------|--|
| Application that manages ATM stands | <ul><li>Depositing money in account</li></ul> | <ul> <li>Delivering log files<br/>with information<br/>about the deposits</li> </ul> | Security password | <ul> <li>Withdrawing money from the account before client leaves the event</li> <li>User manual</li> </ul> |

| Application   | Must Have   | Should have   | Could have           | Won't have     |
|---|---|---|----------------------|----------------|
| Application that supports the shops (food/drinks/souvenirs) | ❖ Visitor uses his RFID Chip to<br>pay or his User ID, money is<br>taken from his account | <ul> <li>Application<br/>generates a<br/>receipt for the<br/>visitor</li> </ul> | Security<br>password | User<br>manual |

| Application                               | Must Have  | Should have   | Could have           | Won't have  |
|---|--|---|----------------------|-------------|
| Application that supports the loan stands | Visitor uses his RFID Chip to pay or his User ID to pay, money is taken from his account | <ul> <li>Application<br/>generates a<br/>receipt for the<br/>visitor</li> </ul> | Security<br>password | User manual |

| Application   | Must Have   | Should have   | Could have  | Won't have     |
|---|---|---|---|----------------|
| An application that allows the organization to get a clear status overview of the event | <ul> <li>Camping statistics         (booked and free spots)</li> <li>Visitor status and history</li> <li>Amount of visitors present on the event</li> <li>Amount of visitors that attended the Event</li> </ul> | <ul> <li>Overview of the total balance of all visitors and the total money spent</li> <li>Total money gathered from stands</li> </ul> | <ul> <li>Total amount of a certain product sold</li> <li>Security password</li> </ul> | User<br>manual |

| Application  | Must Have | Should have   | Could have | Won't have |
|--|-----------|---|------------|------------|
| An application to update the event account of the visitors according to the log file |           | <ul> <li>Optimal simple         way to update the         database</li> </ul> |            |            |

| Application                                | Must Have            | Should have  | Could have | Won't have |
|--|----------------------|--|------------|------------|
| A database supporting all the applications | ❖ Optimized database | <ul> <li>Database<br/>covers all the<br/>requirements</li> </ul> |            |            |

| Application           | Must Have  | Should have  | Could have | Won't have |
|-----------------------|--|--|------------|------------|
| Flow<br>documentation | Clear graphical view on all<br>the step the visitor has to<br>take to perform actions in the<br>applications | <ul> <li>Database<br/>covers all the<br/>requirements</li> </ul> |            |            |

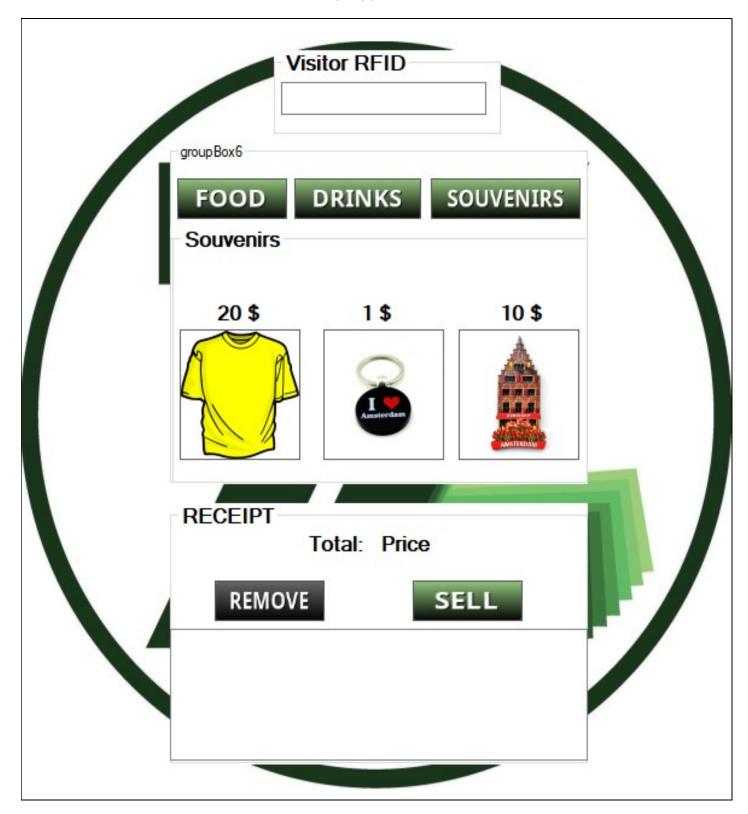
## 4.1 Check - In and Out Application

|   | Check Visitor Visitor Barcode |
|---|-------------------------------|
|   | Register Visitor              |
|   | First Name                    |
|   | Last Name                     |
| 1 | Email                         |
| 1 | Password                      |
|   | Phone                         |
|   | REGISTER FOR EVENT            |

## **4.2 Camping Application**

|   | Check Visitor                         |
|---|---------------------------------------|
|   | Visitor RFID  STATUS                  |
|   | Visitor Status                        |
|   | Register Camping Group                |
| P | Paying                                |
|   | Visitor1 RFID                         |
|   | O Visitor2 RFID                       |
|   | ○ Visitor3 RFID                       |
|   | ○ Visitor4 RFID                       |
|   | ○ Visitor5 RFID                       |
|   | ○ Visitor6 RFID                       |
|   | Camping Spots                         |
|   | 1 2 3 4                               |
|   | 5 6 7 8                               |
|   | Check Availability REGISTER FOR EVENT |

#### **4.3 Shop Application**



#### **4.4 Loan Stand Application**



## **4.5 ATM Stand Application**

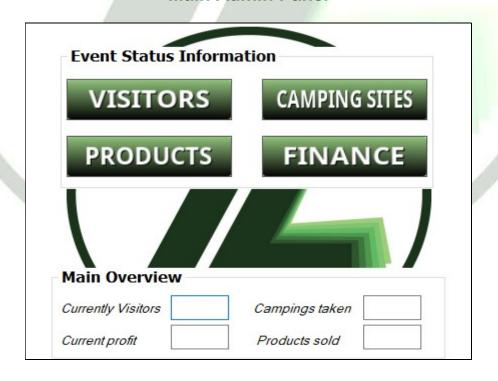
| Visitor RFID           |                         |
|------------------------|-------------------------|
| ATM                    |                         |
| How much you want to a | add in to your account? |
| 10 \$                  | 20 \$                   |
| 50 \$                  | 100 \$                  |
| Other amount:          | Add                     |

#### **4.6 ATM Log Reader Application**



4.7 Admin Panel

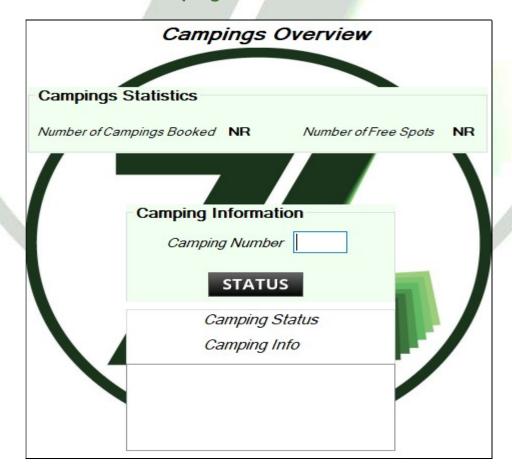
Main Admin Panel



#### **Visitors Overview**



#### **Camping Sites Overview**



## **Products Overview**

| Products C       | )verview |  |
|------------------|----------|--|
| D. HID. d. I     |          |  |
| Bought Products  |          |  |
| Product:         | STATUS   |  |
| Amount sold:     | NR       |  |
| Amount earned:   | NR       |  |
| Product:         | STATUS   |  |
|                  |          |  |
| Quantity loaned: | NR       |  |

**Financial Overview** 

| Visitors    | Financial Ov       | erview      |     |  |
|-------------|--------------------|-------------|-----|--|
| Cui         | rent balance of a  | Il visitors |     |  |
| 7           | otal balance of a  | Il visitors |     |  |
|             | Total mon          | ey spent    |     |  |
| -<br>Campin | g Financial C      | verview     | '   |  |
|             | Total camping sit  |             |     |  |
|             | Total amoun        | nt earned   |     |  |
| Stands      | Financial Over     | erview      |     |  |
|             | Total amoun        | nt earned   |     |  |
| Amount      | of product sold of | or loaned   | 100 |  |
|             | Proudcts           | ~           |     |  |

## **5 Website Wireframe**

# **Home Page**

| Home FEST | TIVAL DISCO | OVER ABOUT | US      |            |         | SIGN IN |  |
|-----------|-------------|------------|---------|------------|---------|---------|--|
|           |             |            | PIC     | CTURE      |         |         |  |
|           |             |            |         | INTRO      |         |         |  |
|           |             | PICTUR     |         | CONTENT A  |         |         |  |
|           |             |            |         |            |         | 7       |  |
|           | PICTURE     |            | RE      |            | PICTURE |         |  |
|           |             |            |         |            |         |         |  |
|           | РНОТО       | S          |         | VIDEOS     | C       | AMPINGS |  |
| PICTURE   |             |            | PICTURE | Р          | ICTURE  |         |  |
|           |             |            | FOOT    | ER CONTENT |         |         |  |

# **FESTIVAL PAGE**

#### **FESTIVAL - Welcome**

| Home | FESTIVAL DI | SCOVER ABOUT       | US                              |                     | SIGN IN |
|------|-------------|--------------------|---------------------------------|---------------------|---------|
|      | FESTIVAL CA | AMPINGS ts Line-up |                                 |                     |         |
|      |             |                    | Trailer                         |                     |         |
|      |             | PICTURE            | PICTURE                         | Text<br>information |         |
|      |             | Content            | Content                         |                     |         |
|      |             |                    | PREVIOUS YEAR<br>PHOTOS AND INF |                     |         |
|      |             |                    | FOOTER CONTEN                   | NT                  |         |

#### **FESTIVAL-Tickets**

| Home FESTIVAL DISCOVER ABOUT US            |             | SIGN IN |
|--|-------------|---------|
| FESTIVAL CAMPINGS  Welcome Tickets Line-up |             |         |
| PICTURE                                    |             |         |
|  | Ticket info |         |
|  |             |         |
| FOOT                                       | ER CONTENT  |         |
|  |             |         |

## FESTIVAL-Line-up

| Home FESTIVAL DISCOVER ABOUT US            | SIGN IN |
|--|---------|
| FESTIVAL CAMPINGS  Welcome Tickets Line-up |         |
| FESTIVAL DATE                              |         |
| LINE - UP INFO                             |         |
|  |         |
| FOOTER CONTENT                             |         |

#### **CAMPINGS-Info**

| Home FESTIVAL DISCOVER ABOUT US | SIGN IN |
|---------------------------------|---------|
| FESTIVAL CAMPINGS               |         |
| Info Book                       |         |
| information text                |         |
|                                 |         |
| slideshow                       |         |
|                                 |         |
| FOOTER CONTENT                  |         |

#### **CAMPINGS-Book**

| Home | FESTIVAL DISCOVER ABOUT US   | SIGN IN |
|------|------------------------------|---------|
|      | FESTIVAL CAMPINGS  Info Book |         |
|      | booking form                 |         |
|      |                              |         |
|      | FOOTER CONTENT               |         |

# **DISCOVER PAGE**

#### Video

| Home FESTIVAL DISCOVER ABOUT US          | SIGN IN |
|--|---------|
| Video Photo Festivals                    |         |
| Content for every festival that happened |         |
|  |         |
| FOOTER CONTENT                           |         |

#### Photo

| Home | FESTI | VAL [ | ISCOVER  | R ABOUT | US          |          |       |  |  | SIGN | IN |
|------|-------|-------|----------|---------|-------------|----------|-------|--|--|------|----|
|      | Video | Photo | Festival | s       |             |          |       |  |  |      |    |
|      |       |       |          | Photos  | from all of | the fest | ivals |  |  |      |    |
|      |       |       |          |         |             |          |       |  |  |      |    |
|      |       |       |          |         | FOOTE       | R CON    | TENT  |  |  |      |    |

#### **Festivals**

| Home FESTIVAL DISCOVER ABOUT US          | SIGN IN |
|--|---------|
| Video Photo Festivals                    |         |
| Content for every festival that happened |         |
|  |         |
| FOOTER CONTENT                           |         |

# **ABOUT US PAGE**

| Home FES | TIVAL DISCOVER | ABOUT US                                  | SIGN IN |
|----------|----------------|---|---------|
|          |                | PICTURE  The name of the company          |         |
|          | Info           | about our company and contact information |         |
|          |                |   |         |
|          |                | FOOTER CONTENT                            |         |

# **SIGN IN PAGE**

| PICTURE | ×                         |  |
|---------|---------------------------|--|
|         | TEXT                      |  |
|         | Email                     |  |
|         | Password                  |  |
|         | SIGN IN                   |  |
|         | Dont have an account yet? |  |
|         |                           |  |
|         |                           |  |

# **Account Page**

## **Account Overview**

| Home FESTIVAL DISCO | OVER ABOUT US  |                       | SIGN IN |
|---------------------|----------------|-----------------------|---------|
|                     | Text           | The email of the user |         |
| Overview            |                |                       |         |
| Tickets             |                |                       |         |
| Settings            | Fe             | estival Livesets      |         |
|                     |                | Popular videos        |         |
|                     |                |                       |         |
| Sign out            | Footer content |                       |         |

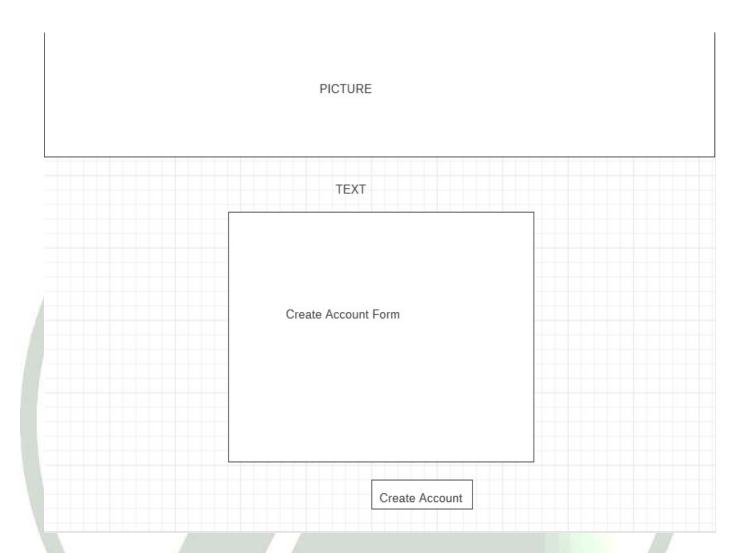
#### **Account Tickets**

| FESTIVAL | DISCOVER ABOUT US         | SIGN IN  |  |  |
|----------|---------------------------|--|--|--|
|          | Text                      | The email of the user  |  |  |
| Overview |                           |  |  |  |
| Tickets  |                           |  |  |  |
| Settings | Т                         | The tickets of the user  |  |  |
|          |                           |  |  |  |
|          |                           |  |  |  |
|          |                           |  |  |  |
|          |                           |  |  |  |
|          |                           |  |  |  |
| Sign out | F                         | Footer content   |  |  |
|          | Overview Tickets Settings | Overview  Tickets  Settings  The state of th |  |  |

## **Account Settings**

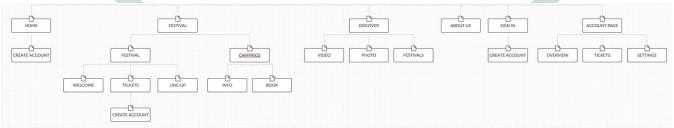
| Home FESTIVAL DIS | COVER ABOUT US     | SIGN IN               |
|-------------------|--------------------|-----------------------|
|                   | Text               | The email of the user |
| Overview          |                    |                       |
| Tickets           | Personal informat  | ion form              |
| Settings          |                    |                       |
|                   |                    |                       |
|                   |                    |                       |
|                   | Reset password for | orm                   |
|                   |                    | SAVE                  |
| Sign out          | Footer content     |                       |

# **Create Account Page**

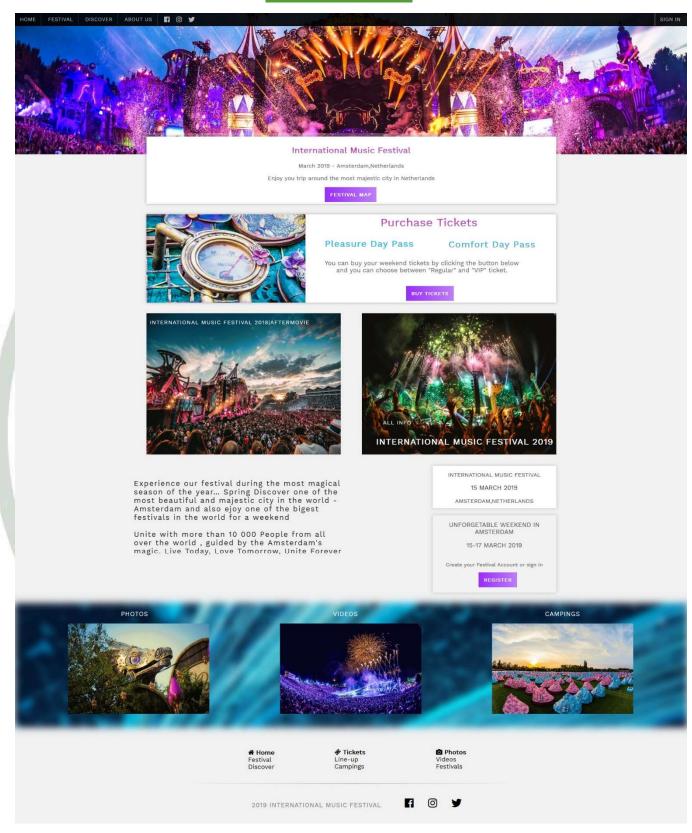


## 5.1 Visual Design and Site Map:

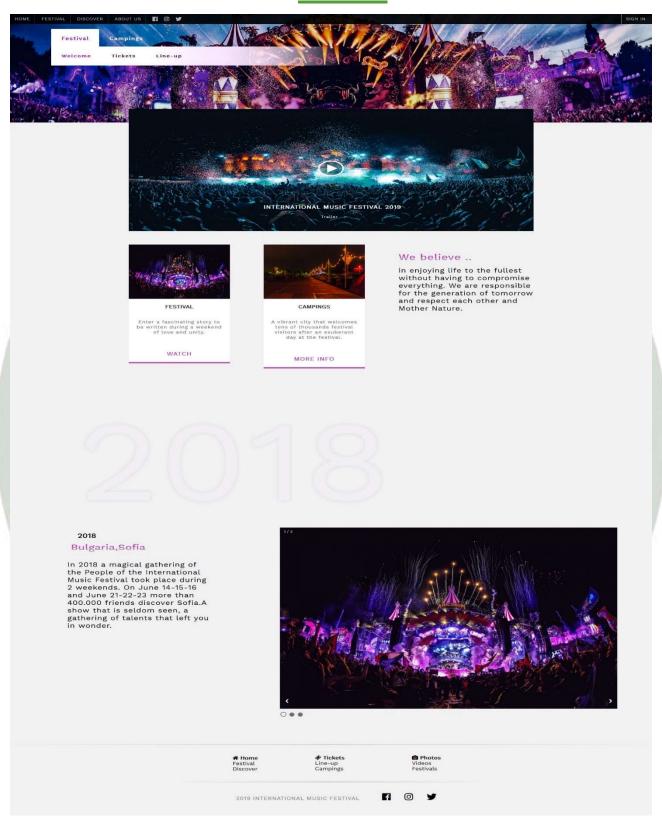
# SITE MAP



## **HOME PAGE**



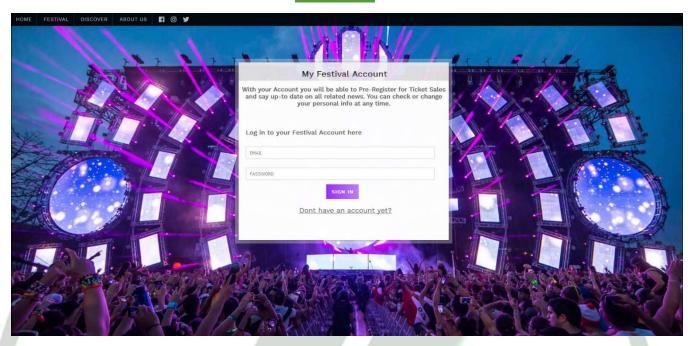
# **Festival**



# **Create Account Page**



# Sign In



# **6 ERD Diagram**

