**Faculty: Business Information Technology**

**645-2 Flutter project - User Guide**

Une image contenant clipart, Graphique, symbole, graphisme

Description générée automatiquement

Students: Milena Lonfat, Luca Del Buono, Elias Borrajo, Alexandre Martroye de Joly, Arnaud Michelet

Professors: Michael Schumacher & Alexandre Cotting

Submitted on 09.09.2023

Table des matières

[1. User Interface 1](#_Toc145153270)

[2. Administration Interface 6](#_Toc145153271)

[3. CONCLUSION 16](#_Toc145153272)

List of figures

[Figure 1: Map 1](#_Toc145153240)

[Figure 2: Museum icon 2](#_Toc145153241)

[Figure 3: Museum pop-up 2](#_Toc145153242)

[Figure 4: Object marker 2](#_Toc145153243)

[Figure 5: Object pop-up 2](#_Toc145153244)

[Figure 6: Migration polygon 3](#_Toc145153245)

[Figure 7: Migration pop-up 3](#_Toc145153246)

[Figure 8: Filter button 4](#_Toc145153247)

[Figure 9: filter menu 4](#_Toc145153248)

[Figure 10: Options to filter 4](#_Toc145153249)

[Figure 11: Reload button 4](#_Toc145153250)

[Figure 12: Example of question 5](#_Toc145153251)

[Figure 13: Score page 5](#_Toc145153252)

[Figure 14: Admin authentification 6](#_Toc145153253)

[Figure 15: tabs of admin's console 6](#_Toc145153254)

[Figure 16: List of museums 7](#_Toc145153255)

[Figure 17: Museum Creation 8](#_Toc145153256)

[Figure 18: Location selection of museum 8](#_Toc145153257)

[Figure 19: Museum's List after adding a new one 9](#_Toc145153258)

[Figure 20: Museum details with objects 9](#_Toc145153259)

[Figure 21: Creating an object to a museum 10](#_Toc145153260)

[Figure 22: Image added to an object from the editing page 10](#_Toc145153261)

[Figure : Museum's edition page 11](#_Toc145153262)

[Figure : Museum's deletion page 11](#_Toc145153263)

[Figure : Tags List 12](#_Toc145153264)

[Figure : List of migratory flow 12](#_Toc145153265)

[Figure : migration flow points 13](#_Toc145153266)

[Figure : Question's list 14](#_Toc145153267)

[Figure : Player's list 15](#_Toc145153268)

[Figure : List of filters 15](#_Toc145153269)

INTRODUCTION

Upon launching the application, your initial interface will present a map, replete with an array of discernible icons and strategically positioned buttons, each meticulously designed to facilitate your exploration and engagement with the diverse features and rich content offered by our application.

Une image contenant carte, atlas, texte

Description générée automatiquement

Figure 1: Map

This comprehensive guide has been meticulously curated to provide you with detailed insights and step-by-step instructions pertaining to every element you encounter on this interface. Our aim is to empower you with a profound understanding of these visual cues and interactive elements, elucidating their significance and unlocking the myriad possibilities they offer for your immersive journey of exploration and discovery within our application.

1. User Interface
   1. Map

The focal point of your exploration will be the map, thoughtfully centered on the captivating geography of Switzerland. This cartographic masterpiece serves as the gateway to a world of cultural discovery and historical immersion. Within this captivating map, you will encounter a constellation of interactive elements, to enrich your experience.

Scattered across the map are museum icons, uncover the treasures and narratives held within their walls, promising an enriching voyage through art, history, and culture.



Figure 2: Museum icon

When you click on one of these icons, a popup unfurls, revealing not only the name of the museum but also a direct link to its website. This seamless integration invites you to explore further, providing instant access to additional information and resources about the museum's collections and exhibitions.

Une image contenant texte, capture d’écran, Police, enveloppe

Description générée automatiquement

Figure 3: Museum pop-up

Red markers, serve as beacons guiding your attention to specific objects of interest. Each marker symbolizes a singular artifact or exhibit, awaiting your exploration.



Figure 4: Object marker

Upon clicking on one of these markers, a responsive popup emerges, unveiling a wealth of information. Inside this popup, you'll discover the title of the object, a curated list of images providing visual context, and a comprehensive definition, offering insights into the historical and cultural significance of the artifact. This interactive experience immerses you in the world of each object, fostering a deeper understanding of its context and importance within the broader collection.

Une image contenant capture d’écran, texte, cadre photo

Description générée automatiquement

Figure 5: Object pop-up

Blue polygons elegantly trace the migrations of objects across time and space, enveloping the map in an ethereal tapestry of historical movements. These intricate shapes offer a visual narrative, inviting you to delve into the captivating stories of how these objects traversed the globe.

Une image contenant carte, texte, atlas

Description générée automatiquement

Figure 6: Migration polygon

When you click on one of these polygons, a fascinating window opens, revealing a detailed description of the object's journey, along with its ultimate arrival point. This immersive feature allows you to unravel the complex narratives of historical migrations, shedding light on the cultural exchanges and global journeys that have shaped our world's heritage.

Une image contenant texte, capture d’écran

Description générée automatiquement

Figure 7: Migration pop-up

* 1. Filters

On the opposite end, at the bottom left, lies the Filters button. This feature empowers you to refine your exploration by applying various filters, enabling you to customize your map experience according to your interests and preferences.

Une image contenant texte, Police, capture d’écran, ligne

Description générée automatiquement

Figure 8: Filter button

When you give that Filters button a click, you'll see a neat menu pop up.

Une image contenant texte, capture d’écran, Police, nombre

Description générée automatiquement

Figure 9: filter menu

From there, you can choose which category of filter you want to use to refine your map experience. Each category has its own specific set of filters that'll make your exploration even better.

Une image contenant texte, capture d’écran, Police, nombre

Description générée automatiquement

Figure 10: Options to filter

If you want to undo all the applied filters, you can just push the reload button at the top.

Une image contenant texte, capture d’écran, ligne, Police

Description générée automatiquement

Figure 11: Reload button

It is to note that the feature does not fully work as intended yet.

* 1. Quiz

Nestled in the bottom right corner, just above the administrative controls, you will find the Quizz button. This gateway will challenge your knowledge and understanding of the exhibits. It's an opportunity to engage with the content in an interactive and educational way.

Clicking on the Quizz button opens up an engaging and informative experience. You'll be presented with a series of thought-provoking questions, each accompanied by a set of preset answer choices in the Multiple Choice Question (MCQ) format.

Une image contenant texte, capture d’écran

Description générée automatiquement

Figure 12: Example of question

As you progress through the quiz, your answers will be recorded, and at the end of the session, you'll receive your score, offering valuable insights into your knowledge and comprehension.

Une image contenant texte, capture d’écran, Police

Description générée automatiquement

Figure 13: Score page

Should you wish to share your results or revisit the quiz, convenient options are at your fingertips. Allowing you to save your achievements to challenge your friends and colleagues. Alternatively, if you're eager for another round of quizzing, you can choose to retake the quiz for a chance to improve your score.

It's worth mentioning that you can easily switch back to the map whenever you like during the quiz, ensuring your exploration and learning flow smoothly. Additionally, to account for unexpected breaks or moments of reflection, we've implemented a handy feature: if you don't answer a question within a set time limit, the application will automatically guide you back to the map, enabling you to continue your journey at your preferred pace.

1. Administration Interface
   1. Login

On the bottom right of the home page of the application, the button  allows you to access to the admin console of the application. Clicking on it, you are redirected to a login page where you must enter your credentials to access admin privileges.

Une image contenant texte, capture d’écran, Police, conception

Description générée automatiquement

Figure 14: Admin authentification

Once the authentication is complete, you access to the admin console in which you find several tabs.



Figure 15: tabs of admin's console

* 1. Museums

The first tab of the admin console allows you to manage the museum of the application. In this tap, the list of all the museums of the application is displayed.

Une image contenant texte, capture d’écran, logiciel, Icône d’ordinateur

Description générée automatiquement

Figure 16: List of museums

* + 1. Create a museum object

By clicking on the  button at the top right of the page, you are redirected to a page that allows you to add a new museum to the list. To do this, you need to enter a name and an url to a website. When you press on the button, you are redirected to a map where you must click somewhere to select a location for your museum. To save the location, you must click on the  button.

Une image contenant texte, capture d’écran, logiciel, Page web

Description générée automatiquement

Figure 17: Museum Creation

Une image contenant carte, texte, atlas

Description générée automatiquement

Figure 18: Location selection of museum

Clicking on the  button saves your entries and creates a new museum.

Une image contenant texte, capture d’écran, logiciel, Page web

Description générée automatiquement

Figure 19: Museum's List after adding a new one

* + 1. Add an object to a museum

When you click on a museum displayed in the list of museums, a new page opens and allows you to link objects to your museum. On this page, all the linked objects are displayed and can be edited or deleted.

Une image contenant capture d’écran, texte, logiciel

Description générée automatiquement

Figure 20: Museum details with objects

Clicking on the , a page allowing you to create a new object is displayed. As for the museum (section 3.2.1) you can fill the fields as you want. You also have the opportunity to select tags that will help the users to filter from the home page.

Une image contenant logiciel, capture d’écran, texte, Icône d’ordinateur

Description générée automatiquement

Figure 21: Creating an object to a museum

When you edit an object, you can add a picture if you like by clicking on .

Une image contenant texte, capture d’écran, logiciel, Icône d’ordinateur

Description générée automatiquement

Figure 22: Image added to an object from the editing page

Once all your changes are done, click on  to save your changes.

* + 1. Edit a museum object

From the museum tab, you can also edit a museum that already exists in your application by clicking on the  button. You are then redirected to the edit page of this museum. From, there, you can change any field you want the same way you did when creating a museum at the point 2.2.1. The  button allows you to save your modifications.

Une image contenant texte, capture d’écran, Police, nombre

Description générée automatiquement

Figure : Museum's edition page

* + 1. Delete a museum object

From the museum tab, you also have the option to delete a museum by clicking on the  button. A pop-up then appears asking you to confirm your intention to delete the museum.

Une image contenant texte, Police, algèbre, capture d’écran

Description générée automatiquement

Figure : Museum's deletion page

Click on “Supprimer” to perform the deletion or on “Annuler” to cancel it.

* 1. Tags

The second tag of the admin console has as a purpose to manage the tags of the application. On the tag tab, all the tags with their various option are displayed as a list.

Une image contenant texte, logiciel, Icône d’ordinateur, Page web

Description générée automatiquement

Figure : Tags List

As for the museum, you can add a new tag by clicking on the  button, edit an existing tag by clicking on the  button and delete a tag by clicking on the  button. For more details, please refer to the sections 2.2.1, 2.2.2 and 2.2.3.

* 1. Migrations

The third tab helps you to manage the migratory flows of the application.

* + 1. Create a new migration object

When you click on the  button at the top right of the screen, the page to add a new migratory flow opens and you must fill all the fields in it.

Une image contenant texte, ligne, capture d’écran, Police

Description générée automatiquement

Figure : List of migratory flow

The  button opens a new page which asks you to give a name to the area you are about to create. After having filled this field, click on the  button. You are then redirected to the map and are now allowed to draw a polygon representing the migratory flow area by clicking on several points of the map.

Une image contenant carte, texte, atlas, capture d’écran

Description générée automatiquement

Figure : migration flow points

Back on the page to add a zone, you can click on  to add your new area to your migration. And then click on the  to create your new migration.

* + 1. Edit and delete a migration

As for the museums and the tags tab, click on the  to edit a migration and on the  button to delete one of them (please refer to the sections 2.2.2 and 2.2.3).

* 1. Quiz

The quiz tab allows you to manage the quiz and the questions contained in it. This tab displays the list of all the questions of the quiz with the possible answers to each question. The correct answer is marked with a tag.

Une image contenant capture d’écran, logiciel, texte

Description générée automatiquement

Figure : Question's list

* + 1. Create a new question for the quiz

To create a new question, press on the  button on the top right of the screen. On the page that opens, fill the fields for the question and the 3 possible answer and choose which answer is the correct answer one.

Une image contenant texte, capture d’écran, Police, carte de visite

Description générée automatiquement

Click on  to add your new question to the quiz.

* + 1. Edit and delete a question

As for the museums, the tags and the migration tab, click on the  to edit a question and on the  button to delete one of them (please refer to the sections 2.2.2 and 2.2.3).

* 1. Players

The joueurs tab displays a list of all the players who completed the quiz with their id, the time at which they took the quiz, their email address, and their score.

Une image contenant texte, nombre, ligne, logiciel

Description générée automatiquement

Figure : Player's list

On this page, you have several filter options available at the top right to display the list as you prefer.

Une image contenant texte, Police, capture d’écran

Description générée automatiquement

Figure : List of filters

At any time, you also have the opportunity to delete a player by clicking on the .

1. CONCLUSION

In conclusion, our application offers a comprehensive and engaging experience for users interested in exploring the rich cultural heritage of Switzerland. The user interface is thoughtfully designed, with icons, markers, and polygons on a map serving as gateways to museums, artifacts, and historical narratives. Users can easily access detailed information and even embark on an educational quiz to test their knowledge.

The administration interface provides control over the application's content, allowing administrators to manage museums, tags, migratory flows, questions, and quiz results. It offers a seamless process for adding, editing, and deleting content elements, ensuring the application's data remains up-to-date and relevant.

Overall, our application combines interactive exploration with educational opportunities, making it a valuable tool for those eager to delve into Switzerland's cultural heritage. Users can engage with museums, artifacts, and historical narratives while administrators have the tools needed to curate and maintain the application's content effectively.