**Luxplorer Development Plan**

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Table of Contents

[1. PRODUCT DESCRIPTION 3](#_Toc163423013)

[2. TEAM DESCRIPTION 4](#_Toc163423014)

[3. SOFTWARE PROCESS MODEL DESCRIPTION 5](#_Toc163423015)

[4. PRODUCT DEFINITION 6](#_Toc163423016)

[5. PROJECT ORGANIZATION 16](#_Toc163423017)

[**Matrix of Responsibilities** 16](#_Toc163423018)

[6. Gantt Chart 16](#_Toc163423019)

[7. VALIDATION PLAN 16](#_Toc163423020)

[8. RISK ASSESSMENT 17](#_Toc163423021)

[Risk Identification 17](#_Toc163423022)

[Risk Prioritization 18](#_Toc163423023)

[Risk Mitigation 18](#_Toc163423024)

[9. TOOLS 19](#_Toc163423025)

[11. ARCHITECTURE 19](#_Toc163423026)

# PRODUCT DESCRIPTION

When visiting famous places, tourists often miss out on real experiences and end up in tourist traps. This means they don't get to learn about traditional ways of life, meet citizens, or try traditional foods. This can lead to negative reviews that hurt the reputation of Luxor City and tourism in general. It's important to avoid these traps and have a more authentic experience.

Luxplorer is a travel website run by Luxplorer Tourism that encourages visitors to explore Luxor's wonderful history and culture by providing them with thrilling travel experiences. Travelers may explore incredible company trips on the Luxplorer website, search for and book any trip that interests them, read through other travelers' blogs and reviews, and share their own experiences.

The Luxplorer Tourism team can also add, modify, or cancel a trip using our website, which helps them better serve their customers and expand their business. Reports can be made to monitor their advancement as well.

# TEAM DESCRIPTION

|  |  |  |  |
| --- | --- | --- | --- |
| Team Members  Concepts | Ahmed Yahia | Rwida Gaber | Camellia Mohamed |
| Database Management | X | X | X |
| Web Designer |  | X | X |
| Web Developer |  | X | X |
| Backend Developer | X |  |  |
| Security | X | X | X |
| Research | X | X | X |

The skills needed for this project is:

* Project management
* Attention to details.
* Collaboration
* Time management
* Respect to each other.
* Problem solving
* Willing to learn.

Overall, our team has variety in many of the project-related topics. Rwida and Camellia's frontend expertise ensures that the project's design components are controlled as they create a travel website that is not only beautiful to look at but also functional and user-friendly. Ahmed has extensive backend experience, so he can ensure the backends’ operation, security, scalability, and ability to deliver error-free user experience as possible. This makes the platform more user-friendly and reliable for tourists, which increases the success of our website.

There may need a Subject Matter Expert (SME) because we don’t have much experience in travelling and trip arranging website and how this business is being managed.

# SOFTWARE PROCESS MODEL DESCRIPTION

we are going to use the waterfall method for aur website development, because we have a clear understanding of what the website needs to do and how it should look and function, we also need to finish this project at the end of the semester and this is strict deadline lead to our need of structured timeline where each phase must be completed before moving on to the next, in addition, we don’t have a real client to be involved in the development phase, but while the waterfall method provides a clear structure for our project with a fixed deadline, it's important to acknowledge that it can be less adaptable to changes later in the development process. We'll need to carefully manage requirements upfront to minimize the need for modifications. However, we should be prepared to revisit the plan if critical changes arise

# 4. PRODUCT DEFINITION

Context Diagram

A diagram of a travel website

Description automatically generated

Use Cases

Use case Diagram

A screenshot of a computer screen

Description automatically generated

**Traveler’s Use Cases**

|  |  |
| --- | --- |
| **Use Case Name** | Register |
| **UC ID** | 1 |
| **Description** | Traveler creates a new account |
| **Trigger Event** | Traveler click on “sign-up” button |
| **Precondition** | Traveler open the website |
| **Postcondition** | Traveler has created account successfully |
| **Happy Flow** | 1. Open the application. 2. Click on “sign up” button. 3. Traveler enters his data. 4. Click on “create account” button. 5. Application validates entered data. |
| **Exceptions** | If user entered wrong data, print message “data are not-valid, please try again” |

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| **Use Case Name** | Login |
| **UC ID** | 2 |
| **Description** | Traveler enter to his account |
| **Trigger Event** | Traveler click on “login in” button |
| **Precondition** | Traveler has been registered to the application |
| **Postcondition** | Traveler has successfully logged in his account |
| **Happy Flow** | 1. Open the application. 2. Click on “log in” button. 3. Traveler entered his username and password. 4. Click on “log in” button. 5. Application validates entered data. |
| **Exceptions** | 1. If user entered wrong username or password, print message “username or password isn’t correct please try again.” 2. If username is not existing, print message “this username is not registered, Do you want to register?”  * If yes change directory to Register page * If no exit log in page |

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| --- | --- |
| **Use Case Name** | Search |
| **UC ID** | 3 |
| **Description** | Search allow traveler to find the trips suitable for him |
| **Trigger Event** | The traveler initiates the search by entering their desired travel information. |
| **Precondition** | The Luxplorer website has up-to-date information on available trips and their pricing. |
| **Postcondition** | All trips that correspond with the user-added travel details are displayed. |
| **Happy Flow** | 1. The system displays a form for entering travel information (e.g., number of adults, number of children, price, duration, date). 2. The system query on trips that suites this info. 3. The system views all matches trips. |
| **Exceptions** | 1. If there is no trip matches traveler search, return “sorry there is no available trips” |

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| **Use Case Name** | Book trip |
| **UC ID** | 4 |
| **Description** | Traveler Book a trip |
| **Trigger Event** | Click “Book” button. |
| **Precondition** | User must be logged in |
| **Postcondition** | The Website will send a request with booking info to Luxplorer team and Adding trip into traveler trip. |
| **Happy Flow** | 1. The traveler selects the option to book a trip. 2. The system provides a form for entering booking details (e.g., number of adults, number of children, …). 3. The system checks if there are available places. 4. The system presents the traveler with a booking confirmation screen summarizing the trip details and total price. 5. The system asks user if he want to confirm booking.    1. if “YES”: The system send request to Luxplorer team.    2. Adding trip into your trip with process status. |
| **Exceptions** | 1. If There is no available places return a message stating “Sorry there is no Available Places ”. |

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| **Use Case Name** | Manage trip |
| **UC ID** | 5 |
| **Description** | Allows a traveler with an existing booking to update or cancel their trip. |
| **Trigger Event** | Click on “Manage Trip” |
| **Precondition** | Traveler is logged in to his account and has a coming booked trips. |
| **Postcondition** | The Trip is Updated/Canceled |
| **Happy Flow** | 1. Traveler click “View my trips”. 2. Traveler select trips he wants to cancel or update. 3. If he wants to update trip    1. System view form with his book information    2. Allow him to update (e.g., number of adults, number of children, …).    3. Click on “Save” button.    4. The system confirms changes and send it to Luxplorer team 4. If he want to cancel    1. The system displays the trip details and cancellation policy.    2. Click on “Cancel” button.    3. The system confirms cancelation and send it to Luxplorer team. |
| **Exceptions** | 1. If traveler wants to update/cancel a past trip, return “You are not allowed to do this”. 2. if the traveler's update or cancellation is incompatible with Luxplorer policy, return "You aren't permitted to do this". |

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| **Use Case Name** | Save to Favorite |
| **UC ID** | 6 |
| **Description** | Add a trip to favorite to view or book it in another time |
| **Trigger Event** | Click on Heart icon in the trip traveler want to save. |
| **Precondition** | Identify a trip traveler want to sav |
| **Postcondition** | The trip will be added to favorite list |
| **Happy Flow** | 1. Traveler identifies a trip that interests him. 2. Clicks "Save to Favorites" button . 3. The system confirms the trip has been saved to the traveler's "Favorites" list. |
| **Exceptions** | 1. if the traveler is not logged in, the system prompts them to log in before saving the trip to favorites. |

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| **Use Case Name** | Create Blog |
| **UC ID** | 7 |
| **Description** | Allows a traveler to create a new blog. |
| **Trigger Event** | Click “Create blog” button. |
| **Precondition** | Traveler must be logged in. |
| **Postcondition** | A new blog is created under the traveler's account. |
| **Happy Flow** | 1. Click “Create blog” button. 2. The system allow the user to enter details for their new blog, (e.g., Blog title, Blog description, Category). 3. User confirms the creation of the blog. 4. The system creates the new blog and publish it |
| **Exceptions** | 1. if the traveler is not logged in, the system prompts them to log in before saving the trip to favorites. 2. If required information like the blog title is missing, the system returns “Missing Information are required”. |

**Manger’s Use Case**

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| **Use Case Name** | **Add Trip** |
| **UC ID** | 1 |
| **Description** | Manager adds a new trip to the website. |
| **Trigger Event** | Manager click on “Add Trip” button. |
| **Precondition** | Manager opens the website on a computer that has its IP address whitelisted. |
| **Postcondition** | Trip added successfully. |
| **Happy Flow** | 1. The website manager logs in to the Luxplorer website administration area. 2. The system authenticates the website manager and grants access to the trip management console. 3. The website manager selects the option to add a new trip. 4. The system provides a form for entering trip details (e.g., title, destination, description, price, photos). 5. The website manager adds the trip details and sets availability. 6. The website manager submits the new trip for publication. |
| **Exceptions** | -If the manager opens the website on a computer with an IP address not whitelisted, the website will not open.  -If the manager adds invalid data, the system will not save the trip and will return a message stating 'Information is wrong'. |

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| **Use Case Name** | **Adjust Trip** |
| **UC ID** | 2 |
| **Description** | The manager adjusts a trip on the website. |
| **Trigger Event** | Manager click on “Adjust Trip” button. |
| **Precondition** | Manager opens the website on a computer that has its IP address whitelisted. |
| **Postcondition** | Trip Deleted/Updated successfully. |
| **Happy Flow** | 1. The website manager logs in to the Luxplorer website administration area. 2. The system authenticates the website manager and grants access to the trip management console. 3. The website manager selects an existing trip from the list. 4. The system displays the details of the selected trip. 5. The website manager can edit various aspects of the trip (e.g., description, price, photos). 6. The website manager can delete trip. 7. The website manager submits the changes for publication. |
| **Exceptions** | -If the manager opens the website on a computer with an IP address not whitelisted, the website will not open.  -If the manager adds invalid data, the system will not save the trip and will return a message stating 'Information is wrong'. |

|  |  |
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| **Use Case Name** | **Delete Blog** |
| **UC ID** | 5 |
| **Description** | Remove a blog post from the Luxplorer website, potentially due to outdated information, inappropriate content, or other reasons. |
| **Trigger Event** | Manager click on “Delete Blog” button. |
| **Precondition** | Manager opens the website on a computer that has its IP address whitelisted. |
| **Postcondition** | Blog Deleted successfully. |
| **Happy Flow** | 1. The website manager logs in to the Luxplorer website administration area. 2. The system authenticates the website manager and grants access to the blogs management console. 3. The website manager can identify the blog post they want to delete by browsing the list. 4. The website manager confirms their intention to delete the blog post. 5. the system removes the blog post from the website and any associated data. |
| **Exceptions** | -If the manager opens the website on a computer with an IP address not whitelisted, the website will not open. |

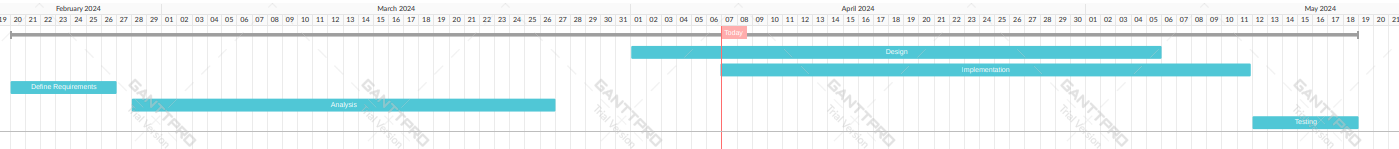
|  |  |
| --- | --- |
| **Use Case Name** | **Create Report** |
| **UC ID** | 6 |
| **Description** | Generate a tailored report based on specific criteria to gain deeper insights into website activity and travel trends. |
| **Trigger Event** | Manager click on “Create Report” button. |
| **Precondition** | Manager opens the website on a computer that has its IP address whitelisted. |
| **Postcondition** | Report is successfully made. |
| **Happy Flow** | 1. The website manager logs in to the Luxplorer website administration area. 2. The system authenticates the website manager. 3. The website manager defines the report criteria: **Reporting Period:** Choose the desired timeframe for the report data. This could be a specific date range (e.g., last month, last quarter, specific dates). 4. The system generates a report based on the defined criteria. 5. The website manager can edit various aspects of the trip (e.g., description, price, photos). 6. The website manager can download the report. |
| **Exceptions** | -If the manager opens the website on a computer with an IP address not whitelisted, the website will not open. |

# 5. PROJECT ORGANIZATION

## **Matrix of Responsibilities**

|  |  |  |  |
| --- | --- | --- | --- |
| Team Members  Concepts | Ahmed Yahia | Rwida Gaber | Camellia Mohamed |
| Database Management | X | X | X |
| Web Designer |  | X | X |
| Web Developer |  | X | X |
| Backend Developer | X |  |  |
| Security | X | X | X |
| Research | X | X | X |

# 6. [Gantt Chart](https://drive.google.com/file/d/1UZrAHYEGE6ymIr9TCFZ4Mr5U3S57sgBN/view?usp=sharing)



# 7. VALIDATION PLAN

**Test Strategy**

Success from our point of view is to have the app functioning properly and conveniently by having travelers to find suitable trip and Book it .

**Our main test plan will be as follows:**

1. Create account
2. Book trips
3. Manage trips
4. Search for trips
5. Create blog

A diagram of a company

Description automatically generated

# 8. RISK ASSESSMENT

## Risk Identification

In this project we have 5 kinds of risks:

1. The complexity of connecting website managers and user accounts with our website poses a technical risk. However, integrating the user website with the a content management system (CMS) concerns the greatest risk.
2. One serious risk is security. Untrusted inputs and unsafe data storage are major risks as well.
3. Project scope is a risk because our website is for a travel firm, and customers may request features that are not included in the original agreement. This could have an impact on the cost and timeline of our development.
4. Misunderstandings with the customer on needs or functionalities might result in rework and delays, which makes communication problems another critical risk.
5. The strict deadline for completing the project by the end of the semester poses a risk. There may be unexpected technical issues, resource constraints, or external dependencies that may need to change the project's scope or schedule.

## Risk Prioritization

1. Communication with our customer
2. Project Scope
3. Strict deadline
4. Technical complexity
5. Security

## Risk Mitigation

1. Communication with our customer: we must communicate with luxplorer team clearly and consistently. To make sure everyone agrees, use project management tools, and we must carefully record the requirements.
2. Project Scope: we will provide a detailed written contract with the luxplorer team that outlines the project's requirements, Features, functionality, deadlines, and change management protocols ought to be included.
3. Strict deadline: We will establish clear milestones throughout the development process to track progress and identify potential delays early on.
4. Technical complexity, before development, we will carry out a full technical feasibility analysis, also we will divide features into smaller, simpler-to-manage modules, to make development and testing easier.
5. Security: to safely store passwords, and other sensitive data, we will use encryption techniques, also our team will train on secure coding standards to prevent risks and Implement secure coding practices in code reviews.

# 9. TOOLS

* Database Management system
* Web Development software
  + Visual Studio code
* UI Designer Software
  + Figma

# 11. ARCHITECTURE

* Computers for testing and Programming