Software Requirements Specification

Version 1.0

Trip Manager

Team 4

|  |  |  |
| --- | --- | --- |
| Member Name | Member Roll # | Primary Responsibility |
| Umair Zohaib | 15L-4247 | Introduction + Use Cases |
| Hamza Rashid | 15L-4280 | Introduction + Use Cases |
| Umer Riaz | 15L-4152 | Use Cases |
| Hassan Saleem | 15L-4330 | Analysis Model |

**Table of Contents**

**Table of Contents ii**

**Revision History iii**

**1.** **Introduction 1**

1.1 Product 1

1.2 Scope 1

1.3 Business Goals 1

1.4 Document Conventions 1

1.5 References 1

**3.** **Functional Requirements** 2

3.1 Use-Case 1 2

3.2 Use-Case 2 3

3.3 Use-Case3 4

3.4 Use-Case4 5

3.5 Use-Case5 6

3.6 Use-Case6 7

**4.** **Nonfunctional Requirements** 8

4.1 Performance Requirements 8

4.2 Security Requirements 8

**Appendix A: Glossary** 9

**Appendix B: Analysis Models** 10

Revision History

|  |  |  |  |
| --- | --- | --- | --- |
| **Name(s)** | **Date** | **Reason(s) For Change(s)** | **Version** |
|  |  |  |  |
|  |  |  |  |

# Introduction

## Product

A web-based solution to help automate travel authorization and manage travel expenses of employees.

## Scope

Employees will be able to ask for authorization of their trips by filling an application. HR manager will be able to approve or disapprove these applications.

Employees will be adding their expenses during the trip and upload payment slips as proof.

HR manager will be able to approve of these expenses and then the employee can claim their money back.

All these travel expenses will be recorded in a DB so that a senior manager can view a report of all the expenses made by employees and apply filters to these reports.

## Business Goals

The product will help make the travel management easy for the company and will also be able to keep proper record of expenses made by employees. Getting trips approved will be more convenient for employees which is also in company’s benefit.

## Document Conventions

* SM stands for Senior Manager.
* DB stands for Database.
* Citation format is APA.
* All heading are in bold.

## References

1. Bandakkanavar, R. (2018). Software Requirements Specification document with example - Krazytech. Retrieved from <https://krazytech.com/projects/sample-software-requirements-specificationsrs-report-airline-database>

# 

# Functional Requirements

3.1

|  |  |  |  |
| --- | --- | --- | --- |
| **Identifier** | | Sign Up in the application | |
| **Purpose** | | Employee can add expenses of travel after signing in | |
| **Priority** | | High | |
| **Actors** | | Employee | |
| **Pre-conditions** | | None | |
| **Post-conditions** | | None | |
| **Typical Course of Action** | | | |
| **S#** | **Actor Action** | | **System Response** |
| **1** | Employee clicks on application to open | | system will open it |
| **2** | Employee will press the sign-up option | | System will open the sign-up page |
| **3** | Employee will enter the username, id and password | | System will check the entered details |
| **4** | Employee clicks the submit button | | System will login the user in application |
| **Alternate Course of Action** | | | |
| **S#** | **Actor Action** | | **System Response** |
| **1** | User already have account | | System will ask for authentication |
| **2** | User will enter the details | | System will check the details and login user |

**Table 1: UC-1**

**3.2**

|  |  |  |  |
| --- | --- | --- | --- |
| **Identifier** | | Fill form for trip authorization | |
| **Purpose** | | Send application to HR manager | |
| **Priority** | | High | |
| **Actors** | | Employee | |
| **Pre-conditions** | | Employee is logged, Employee is not currently on a trip | |
| **Post-conditions** | | Employee will have to close trip after completing trip | |
| **Typical Course of Action** | | | |
| **S#** | **Actor Action** | | **System Response** |
| **1** | Employee clicks on the form for trip | | system will open the form details |
| **2** | Employee will provide the his/her user name and password | | System will check in DB for entered credentials |
| **3** | Employee then provides the trip information | | System will save the info |
| **4** | Employee clicks the submit button | | System will add the trip for employee |

## 3.3

|  |  |  |  |
| --- | --- | --- | --- |
| **Identifier** | | Trip Approval | |
| **Purpose** | |  | |
| **Priority** | |  | |
| **Actors** | | HR Manager | |
| **Pre-conditions** | | Employee has applied for trip | |
| **Post-conditions** | |  | |
| **Typical Course of Action** | | | |
| **S#** | **Actor Action** | | **System Response** |
| **1** | HR Manager clicks to see previous records of employee travel | | system shows the employee travel records |
| **2** | HR Manager allows the trip | | System saves the record |
| **Alternate Course of Action** | | | |
| **S#** | **Actor Action** | | **System Response** |
| **1** | Trip is cancelled by manager | | System makes changes in record |
| **2** | HR Manager writes an email to employee | | System send it to the employee |

**3.4**

|  |  |  |  |
| --- | --- | --- | --- |
| **Identifier** | | Add Travel Expenses | |
| **Purpose** | | Employee can claim the amount spent | |
| **Priority** | | High | |
| **Actors** | | Employee | |
| **Pre-conditions** | | Employee is logged in; Employees trip is approved | |
| **Post-conditions** | | None | |
| **Typical Course of Action** | | | |
| **S#** | **Actor Action** | | **System Response** |
| **1** | Employee clicks to opens his/her account | | System will show the account page |
| **2** | User selects the add travel expense option | | System asks for proof document/slip |
| **3** | User select the option to upload the slip | | System asks for the location of slip |
| **4** | User selects the slip | | System uploads the slip |
| **5** | User presses the submit button | | System saves the slip on users account  And send it to HR Manager |

**3.5**

|  |  |  |  |
| --- | --- | --- | --- |
| **Identifier** | | Approve the Travel Expenses Claim | |
| **Purpose** | | Employee can get his money back | |
| **Priority** | | Medium | |
| **Actors** | | HR Manager | |
| **Pre-conditions** | | Proof slip has submitted by employee | |
| **Post-conditions** | |  | |
| **Typical Course of Action** | | | |
| **S#** | **Actor Action** | | **System Response** |
| **1** | HR Manager opens the proof slip | | System shows the slip |
| **2** | Manager checks the claimed amount and approve it | | System saves the slip in approved slip records |
| **3** | Manager clicks to create a report | | System will create a new report |
| **4** | Manager sends report to Senior Manager | | System shows success dialog box |
|  |  | |  |
| **Alternate Course of Action** | | | |
| **S#** | **Actor Action** | | **System Response** |
| **1** | Manager disapprove the amount claimed | | System sends a message to employee |
| **2** | Manager deletes the slip | | System updates the record and shows success dialog box |

**3.6**

|  |  |  |  |
| --- | --- | --- | --- |
| **Identifier** | | View Reports | |
| **Purpose** | | SR Manager can review expenses made by employees | |
| **Priority** | | Medium | |
| **Actors** | | Senior Manager | |
| **Pre-conditions** | |  | |
| **Post-conditions** | |  | |
| **Typical Course of Action** | | | |
| **S#** | **Actor Action** | | **System Response** |
| **1** | Senior Manager open the report | | Systems shows the report |
| **2** | Senior Manager applies filter on report | | System shows filtered report |

# Nonfunctional Requirements

## Performance Requirements

* System shall send application form to HR manager within 2 minutes required that HR manager is online
* Application Form for trip authorization shall require employee 5 or less minutes to be filled.

## Security Requirements

**Authentication**

There are three types of user; employee and HR manager will have signup and login authentication. While two senior manager accounts will be created by default.

Reports that are visible for senior manager should be protected and kept away other employees.

**Appendix A: Glossary**

**.NET**

ASP.NET offers three frameworks for creating web applications: [Web Forms](https://www.asp.net/get-started/websites#web-forms), [ASP.NET MVC](https://www.asp.net/get-started/websites#mvc), and [ASP.NET Web Pages](https://www.asp.net/get-started/websites#web-pages). All three frameworks are stable and mature, and you can create great web applications with any of them. No matter what framework you choose, you will get all the benefits and features of ASP.NET everywhere.

**Appendix B: Analysis Models**

![A close up of a map

Description generated with very high confidence]()