Politecnico di Milano

Software Engineering 2

Requirements Analysis and Specifications Document

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Contents

Chapter 1

INTRODUCTION

1.1 Purpose

TODO

1.2 Scope

TODO

1.3 Definitions, Acronyms, Abbreviations

TODO

1.4 Revision history

TODO

1.5 Reference Documents

TODO

1.6 Document Structure

TODO

Chapter 2

OVERALL DESCRIPTION

2.1 Product perspective

TODO

2.2 Product functions

TODO

2.3 User characteristics

TODO

2.4 Assumptions, dependencies and constraints

TODO

Chapter 3

SPECIFIC REQUIREMENTS

3.1 External Interface Requirements

3.1.1 User Interfaces

TODO

3.1.2 Hardware Interfaces

TODO

3.1.3 Software Interfaces

TODO

3.1.4 Communication Interfaces

TODO

3.2 Functional Requirements

3.2.1 Scenarios

TODO

3.2.2 Use case descriptions

Registration

Participating actors	Generic visitor
Entry Condition	There are no entry conditions.
Event Flow	1. The visitor clicks on the Register button displayed onto the homepage; 2. The visitor fills all the mandatory fields shown required by the system including his email, his password (twice) and a captcha; 3. The visitor clicks on Confirm button; 4. The visitor receives a confirmation email and clicks on the confirmation link; 5. The system saves all user data inserted.
Exit Condition	The visitors registration is completed successfully, so the visitor is registered as an user of Travlendar+ and he can log in into the system as a registered user.
Exception	If: • The visitor insert an email already connected to an existing account; • Insert invalid infos into in some mandatory field; • Leave empty a mandatory field; Then the system will request the visitor to complete/ revise all uncorrected field, highlighting them. if the visitor doesnt activate the account, after a month the activation link will expire and all user data will be deleted.

Login

Participating actors	Unauthenticated User
Entry Condition	There are no entry conditions.
Event Flow	1. The visitor clicks on the 'Login' button displayed on the homepage; 2. The visitor inserts the email and the password previously used for registration; 3. The visitor clicks on 'Confirm' button; 4. The system redirect the user to the main view of Travlendar+.
Exit Condition	The Visitors login is completed successfully, so the visitor can use all the Travlendar+ functions.
Exception	If: • The email inserted is not one of the emails previously used by an user to sign up; • The password inserted by the visitor is not the one associated with the email inserted; • At least one of the field is left empty; Then the system will notify the visitor to complete/ revise all uncorrected field, highlighting them.

Create event

Participating actors	User
Entry Condition	The user must be logged/registered in Travlendar+.
Event Flow	1. The user insert: date, starting time, eventually ending time, location, name of the event, type of event (predefined or personalized), description, starting location (previous one or others); 2. The user confirms the events creation; 3. The system computes the best possible path according to users preferences Describe the Exit Condition;
Exit Condition	The system redirects the user to the calendar and add the travel time slot required to reach that event (comprehensive of travel description).
Exception	The inserted event overlaps with one or more previously added events (also the travel is considered in the eventual overlap). The user is notified with a warning message and the overlapping event isnt considered in the user travel planning schedule (but remain saved into the calendar), the system have to choose which one of the overlapped event he want to attend.

Define preferences

Participating actors	User
Entry Condition	The user must be registered and logged in Travlendar+.
Event Flow	1. The user opens the menu; 2. The user selects the tab 'preferences'; 3. The system shows a page containing fields to fill; 4. The user defines his preferences by filling the fields on the page; 5. The user clicks on the 'save' button.
Exit Condition	The user has selected his preferences, which have been saved correctly.
Exception	If the user exits the page without clicking the 'save' button, then the system will not save the preferences modified by the user.

Define flexible breaks

Participating actors	User
Entry Condition	The user must be logged/registered in Travlendar+.
Event Flow	1. The user click on the dedicated button to add breaks into the schedule; 2. The user inserts a flexible period of time (specifying start and end times) into which the break must happen and the minimum amount of time that must be dedicated to the break; 3. The user also specifies the return period of the break (daily, weekly, monthly or until a specified date) or if it refers only to certain days of the week (until a specified date);
Exit Condition	The system notifies the user that the info about break are correctly saved.
Exception	It is not possible to dedicate the required time into the schedule of one or more days because of previous added events. The system asks to the user to change the length of the break.

Arrange trips

Participating actors	User, Transport service provider
Entry Condition	The user must be logged in Travlendar+.
Event Flow	1. The user clicks on the arrange trips button; 2. The user select the trip he want to arrange; 3. The system shows all tickets to be buyed and the tickets already bought; 4. The user clicks on the ticket he want to buy. 5. The system redirect the user to the right website (of the right Transport service provider) in order to buy the tickets.
Exit Condition	The user has successfully arranged his travel.
Exception	There are no exceptions.

Locate the nearest sharing vehicle

Participating actors	User, Transport service provider
Entry Condition	The user has opened the arrange trip tab and is about to travel.
Event Flow	1. The user open the map; 2. The system shows in the map the nearest vehicle of car sharing according to the chosen path and the infos provided by the transport service provider;
Exit Condition	The user take and use the suggested vehicle.
Exception	• If no near vehicle is found the system re-compute another path and show it to the user; • if the user take a shared vehicle, but not the suggested one nothing happen, just as he has taken the suggested vehicle;

Add ticket possessed

Participating actors	User
Entry Condition	The user has opened the arrange trip tab.
Event Flow	1. The user selects the tab 'my tickets'; 2. The system show a page containing all the tickets and passes possessed by the user; 3. The user clicks on the 'add ticket' button; 4. The system show a page containing fields to fill; 5. The user inserts info regarding the ticket/pass possessed; 6. The user clicks on the 'save' button; 7. The system adds the ticket/pass to those already present in the user account.
Exit Condition	The user has successfully inserted his ticket/pass in the system.
Exception	If the user exits the page without clicking the save button, then the system will not save the ticket added by the user.

Obtain feasible travel paths

Participating actors	User, google maps APIs
Entry Condition	The user must be registered and logged in Travlendar+.
Event Flow	1. The user open the calendar tab; 2. The user selects a day in the calendar; 3. The system shows the proposed feasible paths (shown as travel events) between the events; 4. If the user want to select an alternative travel path he can click on the travel event in order to choose among the proposed feasible alternatives.
Exit Condition	The user has seen the possible travel paths that can be used to reach his meetings.
Exception	If no feasible travel path exist between two events, the system shows a warning in the calendar.

Create personalized event profiles

Participating actors	User
Entry Condition	The user must be registered and logged in Travlendar+.
Event Flow	1. The user opens the menu; 2. The user selects the tab 'create personalized type of event'; 3. The system shows a page containing a text field to fill; 4. The user inserts the name of the personalized type of event that he wants to create; 5. The user inserts the constraints on travel means related to that type of event; 6. The user clicks on the 'save' button; 7. The system adds the new type of events to those already existing.
Exit Condition	The user has successfully created a new personalized type of event in the system.
Exception	If the user exits the page without clicking the 'save' button, then the system will not save the new personalized type of event created by the user.

View calendar

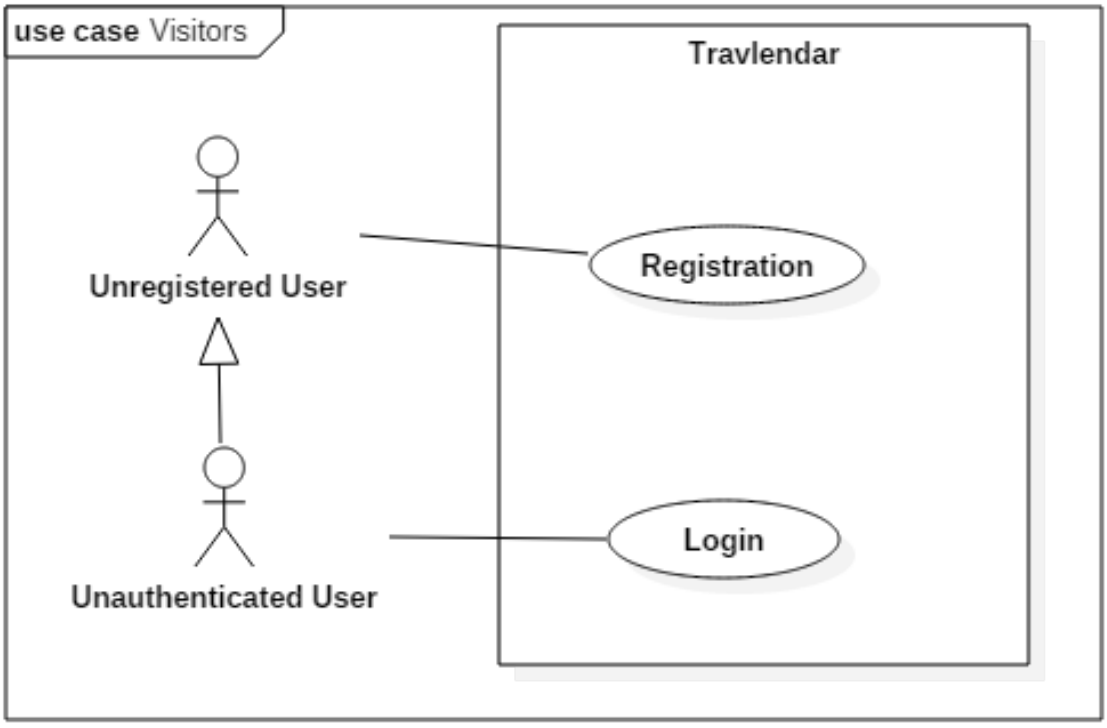
Participating actors	User
Entry Condition	The user must be logged in Travlendar+.
Event Flow	1. The user clicks on the calendar button; 2. The system shows a calendar including all inserted events, and the travel paths related.
Exit Condition	The system let the user check his calendar.
Exception	There are no exceptions.

Choose between overlapping events

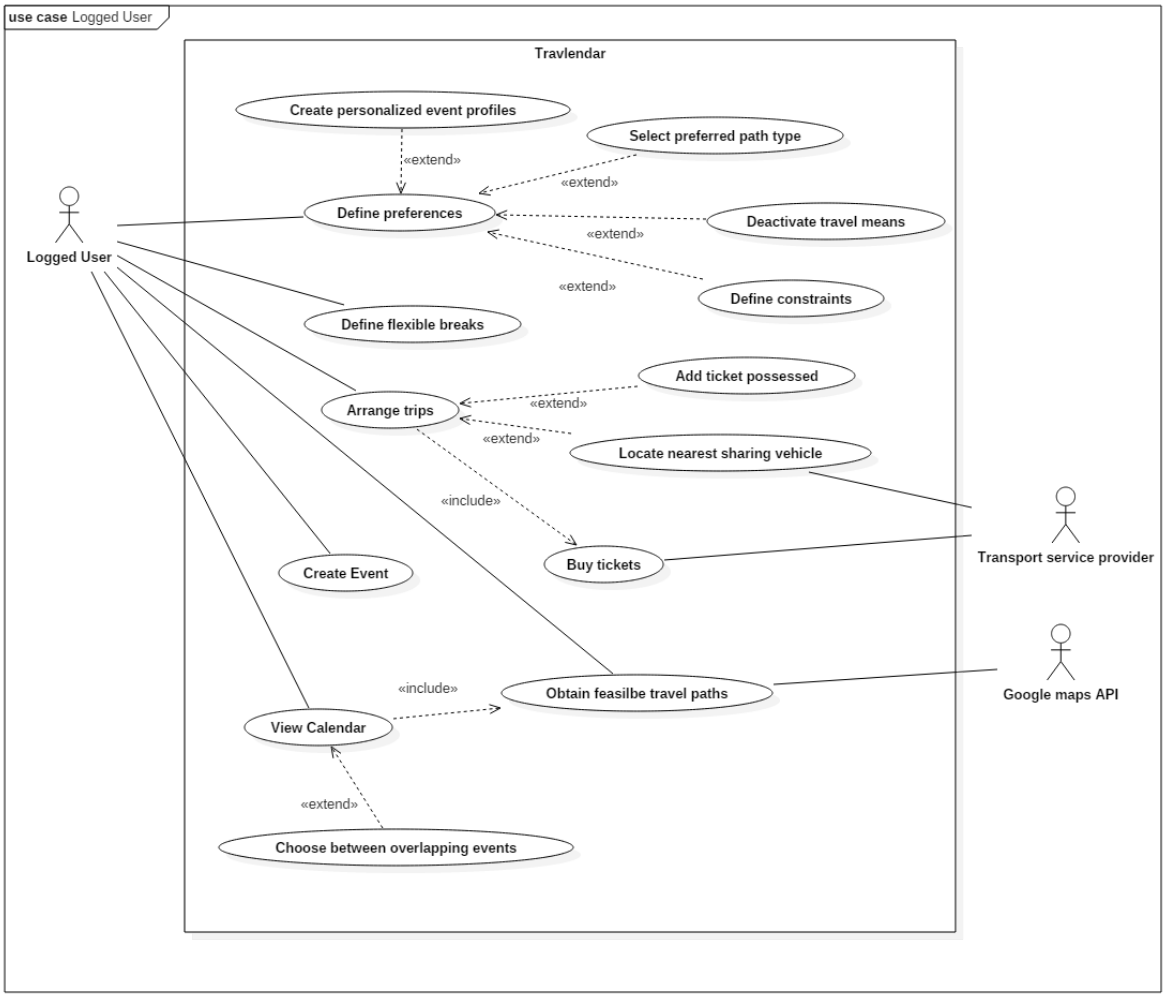
Participating actors	User
Entry Condition	The user must be logged in Travlendar+, at least two events are overlapped.
Event Flow	1. The user clicks on the calendar button; 2. The system shows a calendar including all inserted events, and the travel paths related, the overlapping events are displayed in a separate way in respect to the actual day schedule; 3. The user drag the chosen overlapping event into his day schedule; 4. The system remove the precedent event (in conflict) and put it into the overlapping event list; 5. The system shows the new day schedule, with updated travel paths.
Exit Condition	The system let the user check his calendar.
Exception	There are no exceptions.

3.2.3 Use case diagrams

Visitors



User



3.3 Performance Requirements

TODO

3.4 Design Constraints

3.4.1 Standards compliance

TODO

3.4.2 Hardware limitations

TODO

3.4.3 Any other constraint

TODO

3.5 Software System Attributes

3.5.1 Reliability

TODO

3.5.2 Availability

TODO

3.5.3 Security

TODO

3.5.4 Maintainability

TODO

3.5.5 Portability

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Chapter 4

FORMAL ANALYSIS USING ALLOY

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Chapter 5

EFFORT SPENT

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Chapter 6

REFERENCES

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