

Inf2-SEPP 2022-23

Coursework 2

New or Changed Requirements

This document is to be used as supporting documentation for CW2. It lists new or changed requirements compared to CW1. Note this isn't an exhaustive list of all requirements for the system - some of the basic functionality of the system is still only described in the CW1 spec and in the entertainment provider interview.

The new/changed requirements in this document have been gathered by performing further interviews with the stakeholders of the system. The resulting requirements have been summarised here directly, split into their own section for clarity.

1 Basic Functionality

The system will reside on a kiosk machine and use only text, like in the old app. The entertainment provider owning this system will have one self-service kiosk machine in their office which will be usable by their staff and consumers. Only one person (amongst their staff and consumers) can use it at a time. Users will be able to select from the kiosk's menus any piece of functionality, but the system will always check that they are the correct user type and/or logged in.

Consumers will register and log into the system the same was as in the old system. Entertainment provider staff members will register using an email address and password, which are also what they can change in their profile later. They will log in the same was as on the old system. Consumers and staff will be able to log out of the system, provided they are logged in.

After a consumer books an event, rather being sent a booking confirmation via email (which was suggested by some consumers), such a confirmation including a detailed summary of the resulting booking record, and booking number, will only be displayed.

Regarding payment, consumers prefer being directed to a well-known and fully working

payment system such as PayPal. Therefore, the system should connect to an API for such a system to process payments.

2 Event Tags

The system will allow staff members to add new tags to the system. These tags can later be used for any of their new events.

After creating an event, staff members will not be allowed to later change that event's tag values.

When editing their profile, consumers will be required to provide values (i.e. their preferences) for the tags that the entertainment provider is at that time using throughout their events. If the entertainment provider later adds new tags, consumers who had already edited their profiles will be considered as having an empty value for those new tags.

Also see how tags are used as part of listing events in Section 5.

3 Reviewing Events

When a user attempts to leave a review for an event with a provided event number, the system will check (in order): that an event with the provided event number exists, that the event has already ended, and that this consumer has at least 1 booking which they had not cancelled for this event.

The review itself should only be a single comment, without being split into positive, negative, and rating (as initially suggested by some consumers). When saved, the author name and date and time will also be included. Anonymous reviews will not be implemented.

Because ratings no longer exist, events don't have to be listed in order of mean rating (as initially suggested by some consumers). However, it will be possible for both consumers and staff to list event reviews (see Section 5).

4 Getting Directions to an Event

When a consumer requests directions to an event's venue, providing transport mode will be required (as opposed to what the entertainment providers and what some customers initially suggested). As opposed to what the entertainment provider representatives said in their interview, the system will not need to check the format of the consumer's and venue's address, but only their existence (i.e. if it exists, it is assumed to be valid). Valid transport modes are: car, bike, foot, wheelchair (only a single one is chosen, not combinations). The map system will be queried for the shortest route between the

consumer's and venue's addresses using the chosen transport mode, and return the total distance, and a set of instructions for each leg of the journey consisting of distance for that leg and turn description. This information will be displayed to the consumer. Then, requesting directions for another mode of transport will be possible, but simply as a re-run of this functionality.

5 Listing Events

The functionality of listing events will be kept mostly unchanged to that of the old system. The difference will be in the matching of preferences for consumers, as it will have to deal with preferences for any set tags. If no preference for a particular tag is indicated, events with any value for that tag are included; if an event is not tagged, the default tag value is used.

The following functionality will be added as separate pieces of functionality, which are not part of listing events (despite suggestions by some consumers):

- Listing event reviews. Both consumers and staff will be able to request this, providing an event title. It will involve the system merging reviews from all events with the same title, and displaying them.
- Listing events by distance. This is available only to consumers. It takes the same inputs as listing events for them, but additionally also a preferred means of travel, and a maximum distance. The system will need to check the existence of the consumer's address from their account, and then query the map system for the distance between their address and that of each event venue with a non-empty address. Then it will sort the events by distance; filter them by the consumer's profile preferences (i.e. values to tags), whether active and/or for a certain date (as in listing events); and display the events.

6 Saving and Loading System State

When requesting to save (i.e. export) data, the staff would need to mention a filename where to save the data. The system would complain if a filename was not provided. If everything is fine, it would produce a data file in the standard Java API serialisation format, including users, events, bookings and used event tags.

When requesting to load (i.e. import) data, staff would need to provide a data file. The system would check that the file was properly provided and also in the right format, and issue errors if not. If everything is fine, it would de-serialise data from the file. It would make sure that importing (i.e. adding) the data does not result in duplicated data or invalid objects (e.g., bookings linked to non-existing events, multiple events with the same title and dates, etc.). Only if the checks pass is the data added.

Borislav Ikonov, Vidminas Mikucionis, Cristina Alexandru, 2023.