wastun.at



**Version:** 0.9

|  |  |
| --- | --- |
| **Project name** | wastun.at |
| **Project leader** | Markus Geilehner |
| **Responsible** | Executive |
| **Created on** |  |
| **Last changed** | 09/12/2012 22:44 |
| **Processing status** | |  |  | | --- | --- | | X | in process | |  | submitted | |  | completed | |
| **Document file** |  |
| **V-Modell-XT Version** | 1.3 |

**Content**

[**1**             **Introduction** 3](#_Toc468128355)

[**2**             **Initial Situation** 4](#_Toc468128356)

[**3**             **General Conditions and Constraints** 5](#_Toc468128357)

[**4**             **Project Objectives and System Concepts** 6](#_Toc468128358)

[Basic Functionality 6](#_Toc468128359)

[Facebook Integration 6](#_Toc468128360)

[Interfaces to Other Systems 7](#_Toc468128361)

[Technology Stack 7](#_Toc468128362)

[Opportunities 8](#_Toc468128363)

[Risks 8](#_Toc468128364)

[**6**             **Planning** 9](#_Toc468128365)

[**7**             **List of Abbreviations** 10](#_Toc468128366)

**1**            **Introduction**

Our project “wastun.at” is a website which helps the user planning his spare time. The proposed app lets the user search for activities by providing easy to use filters for price, reachability, and preferences. Based on this the app presents fitting activities with price information, route planning and a plan of how to get there with public transport.

**2**             **Initial Situation**

Currently, searching for spare time activities is a task which has to poll a big bunch of different data sources.

If one only considers a very specific target group like teenagers from 15 to 20 years of age it turns out that there is no real central source for information about proper spare time activities.

Even social media platforms like Facebook, Twitter, SnapChat etc. give only partly useful information. For example, not every company will have their Facebook site where they advertise the activities. This way of searching also claims lots of time because it is not filterable and not known activities can only be found coincidently or via a friend sharing it.

The more complicated it gets if one broadens the target group to children, or more adults, young parents, mid-agers, grand-parents, elderly people, etc. Here some offline calendars of events, like written programs of local cinemas, etc. have to be consulted additionally.

The problem here is two-fold: First of all there is no central source for upcoming events available which enables people to do a focused search for spare time activities.

But on the other hand it is also difficult for event hosts to promote their events. Here again FB is kind a basis but here we also have the same problem as mentioned before, Users will most of the time not find the event.

The only similar website that already exists is szene1.at. There the events can already be filtered by location, they also have public transport support and photos can be watched after the event. But there are several problems: Szene1 is only for parties, really outdated design-wise and half of the people do not even know that there is an event finder, because szene1 is only known for their event photos.

**3**             **General Conditions and Constraints**

Clients for our software and service must be available on Windows, Mac, Linux, Android and iOS. For an efficient development for all these platforms it is planned to go for a web application.

Users searching for spare time activities should be able to use our service immediately without any prior sign-up. Of course, in this case the possible services (storing preferences and learning of preferences) are limited.

If the user agrees to use Facebook for our service, he gains more features, to make signing up via Facebook more attractive. A detailed description can be found at 4. Project Objectives and System Concepts

Since not all event providers can be reached via Facebook it is also necessary to provide a second feed of events into our system. So even though we primarily rely on the Facebook API, there will also be the option for event-host to send us their event via a provided form. Obviously events added by the second way have to be verified first.

To ease promotion and access to our website we need an easy to remember web address. As our webhost we have decided to go with world4you.com. The planned domain we want to use is “wastun.at”. Unfortunately, this domain is currently not available, but the first steps for a change of ownership are already initiated.

The last constraint regarding our project is again related to the Facebook-API. Because we access personal data from their users, Facebook has to verify our project.

**4**             **Project Objectives and System Concepts**

Basic Functionality

Our website can be used by any user with internet access. It is important to note that no registration or transmission of personal data is needed to use our services. Basically, the app is subdivided into three main parts:

* *Events*: a list of events / parties will be shown in a radius of 25 kilometres
  + One can filter the list by:
    - Category, e.g., Music Event, Nightlife, Workshop, etc.
    - Location
  + Next to the filter function we have the “add”-button where event hosts can add a new Event. After a newly created event is accepted it will also be shown in the list.
* *Leisure-Time*: contains suggestions for the question “what can I do?” there are listed activities which can be done like driving with carts or go climbing etc.
  + Can be filtered by:
    - Category, and radius
  + Like in the part Events there is also an add button to add a new activity.
* *Games*: In this category games by users are available. These can be filtered by the sort of game they are and how many players are needed.

Facebook Integration

Additionally, to the basic functionality listed above it is planned to offer a richer feature set to users who register on our website via Facebook. This features include:

* A personalised list of events called “Favourites” where the most attractive ones for the user are listed. This is also the list where the Facebook events which the user is interested in are displayed. There will also be an option to add events from the list of regular events to “Favourites”.
* If the logged in user has friends on Facebook which also use our application, he will be able to see which of his friends are interested in a certain event too.
* Another feature unlocked by logging in via Facebook is a calendar to provide the user an overview of all events in his personal “Favourite” list. There is also the option to send push notifications when one of the events will occur in the near future.
* The last feature for Facebook users is a filter menu to search for events more specific. Planned options for filtering are: location (current position of the user by default), radius around the location (25km by default), timespan between day x and y (a timespan of two weeks starting with the current day by default), categories.

We focus on this approach because of the following reasons.

One of the current main sources of event-posting is Facebook. We chose Facebook, because they have an API which makes crawling events a lot easier, alternatives to Facebook would be our own integration of adding events.

If the user now wants to use our website he has the option to register with Facebook, to help us to find even more events via Facebook. The user access is needed, to get a token for the API, to fetch Events. With the permission of the user, our app can now gather his events, to add them to his own on the website, and also makes them available for other users (only if the event is public).

Interfaces to Other Systems

On the technical side our website works with the following APIs. To find the events, the Facebook-API is used. If a user uses our site with Facebook, his whole public events get recognized and put into our event finder, the private events remain private, of course. To have a static number of events, we also use several “crawlers” which are Facebook users, just made to get as many events as possible on the website.

To get travel routes, taxi-drivers nearby, events including their prices, we use the Google Maps API. For the public transport information, ÖBB Scotty API is used.

Connected with the user’s location, we can provide information about the best events in range, public transport, travelling routes and taxis nearby.

To list the event on our website we take the data provided by Facebook. If this is not sufficient, we send an automatically generated message via Facebook to the event owner. If he wants to provide better information on our website, he is able to submit extra data with our included form. The same form is also directly available on our website, for adding a new event or spare time activity. After submission, an algorithm checks if the form is not spam or junk, if the program cannot certainly detect any of these an email gets sent to us.

Technology Stack

For the Frontend we use HTML 5, Sass and Typescript, the Backend is written in Java 8 with additional Frameworks like Spring. To make our web application accessible for Smartphones, we use Electron to convert it into a mobile application for Android, iOS and Windows, instead of developing a native application each.

**5**             **Opportunities and Risks**

Opportunities

* The website could reach a wide number of users. According to a private survey we did, at least 90% see a real benefit in such system and would use it. Nearly everybody has spare time and wants to spend it as perfect as possible.
* Most of today`s people have an internet access which makes our app accessible to a really big amount of persons.
* Collaborations with several cab companies and event management companies are possible. The plan is to use buzz marketing and direct contact to the cab companies to make collaborations possible. The benefits of sponsored posts would be a higher listing in our list of companies as well as showing the company up as alternative

Risks

* Porting the website to applications will be difficult. No one of us three has previously worked with Electron for porting the website and so we have to learn it by ourselves
* Without a user base, not all events can be shown. To prevent this from happening we have many additional features only available for users registered with Facebook. To attract users, even without active Facebook users who help adding events we also have crawl users as previously explained.
* Facebook has to verify the application and grant access for sensible user data like events. To review the app, a stable website is needed. Also needed is a logo and a Data guideline. If these points mentioned are accessable and sufficient, the app is successfully reviewed and we get the access granted for the data we need.
* At the current state of our app, we are already able to get a list of events, provided by our crawl users. This is possible because the users are registered as test users for our application.

**6**             **Planning**

The resources we need are worktime, a server for the website and several software developing environments.

Project and implementation work have already started since the beginning of the school year

The major milestones we have for now are:

|  |  |
| --- | --- |
| 18.10.16 | Login-Register Frontend (finish) |
| 18.10.16 | Login-Register Backend (finish) (DB etc.) |
| 12.12.16 | Electron Protoype (iOS and Android) |
| 29.11.16 | Login-Register Design |
| 29.11.16 | Main Menu System + Design |
| 5.12.16 | First Request’s (Connection between Back-/Frontend) |
| 06.12.16 | Main functionality “Alpha” (Event-Loading + Filtering) |
| 13.12.16 | First Release v1.0.0 “Grestl” (Alpha) |
| 02.01.17 | Google Maps Integration |
| 09.01.17 | Enhanced Filtering options |
| 16.01.17 | “Add Event” Form |
| 16.02.17 | Second Release v2.0.0 “Kaiserschmarrn” |
| 1.7.18 | End of Project |

**7**             **List of Abbreviations**

|  |  |
| --- | --- |
| **Abbreviation** | **Explanation** |
| **API** | **A**pplication **P**rogramming **I**nterface |

.