Evendo Software Ltd.

Evendo Software Architecture Document

Version 1.0

Evendo	Version: 1.0
Software Architecture Document	Date: 30.06.2020

Revision History

Date	Version	Description	Author
02.12.2019	1.0	See new information on github	Niclas Schmuck
28.06.2020	1.1	Final Release of SAD	Marius Huber, Niclas Schmuck

Evendo	Version: 1.0
Software Architecture Document	Date: 30.06.2020

Table of Contents

1.	Introduction	4
	1.1 Purpose	4
	1.2 Scope	4
	1.3 Definitions, Acronyms, and Abbreviations	4
	1.4 References	4
	1.5 Overview	4
2.	Architectural Representation	5
3.	Architectural Goals and Constraints	5
4.	Use-Case View	6
	4.1 Use-Case Realizations	11
5.	Logical View	12
	5.1 Overview	12
	5.2 Architecturally Significant Design Package	
	5.2.1 Overview	13
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6.	Process View	17
7.	Deployment View	17
8.	Size and Performance	18
9.	Quality	18

Evendo	Version: 1.0
Software Architecture Document	Date: 30.06.2020

Software Architecture Document

1. Introduction

Evendo is a tool to stay organized. We will provide an android app, which is connected to a backend service to sync your calendar entries and todo's as well as sharing your calendar to others.

1.1 Purpose

This document provides a comprehensive architectural overview of the system, using a number of different architectural views to depict different aspects of the system. It is intended to capture and convey the significant architectural decisions which have been made on the system.

1.2 Scope

This software architecture document gives you an overview about our used technologies to keep Evendo running.

1.3 Definitions, Acronyms, and Abbreviations

Backend: NodeJS driven HTTP Rest Services

Frontend: Kotlin driven Android App

1.4 References

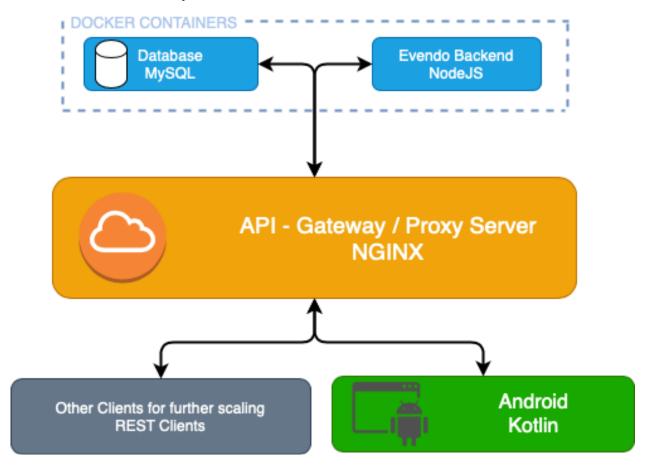
You can find all relevant images which are not added in our SAD in our Evendo GitHub: https://github.com/gnaatz/evendo/tree/docu/doc

1.5 Overview

In the following steps you will get known with our software architecture and we will show you how our app is communicating with our system.

Evendo	Version: 1.0
Software Architecture Document	Date: 30.06.2020

2. Architectural Representation



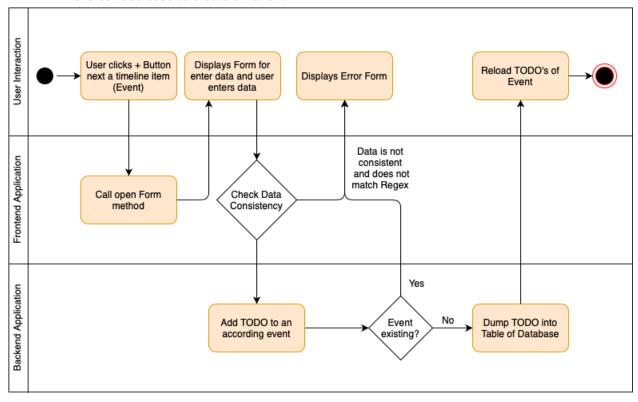
3. Architectural Goals and Constraints

- Our main goal is to keep our architecture fast working and safe. We will implement different changes every month to keep our app secured.
- We want to have a service level agreement to our customers with around 99,7% Uptime.
- If we can't keep this goal, we have to change hard or software.

Evendo	Version: 1.0
Software Architecture Document	Date: 30.06.2020

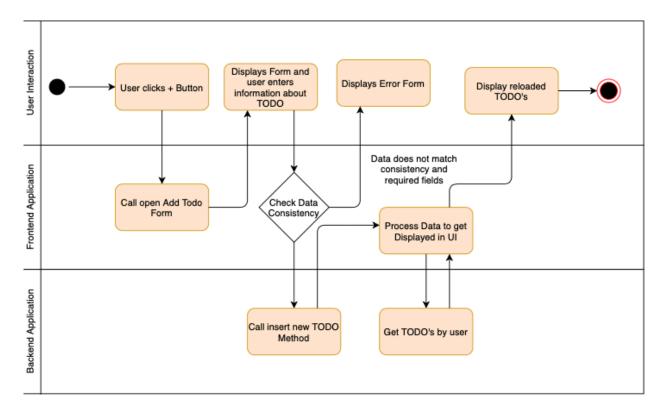
4. Use-Case View

This is our use case to create an event



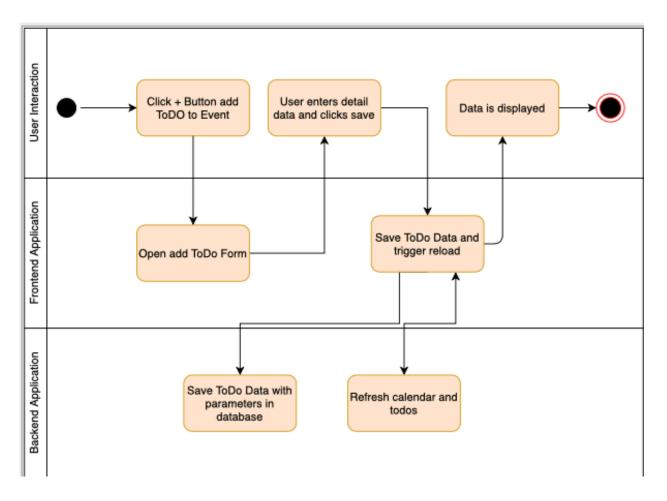
Evendo	Version: 1.0
Software Architecture Document	Date: 30.06.2020

The next Usecase is for creating and TODO:



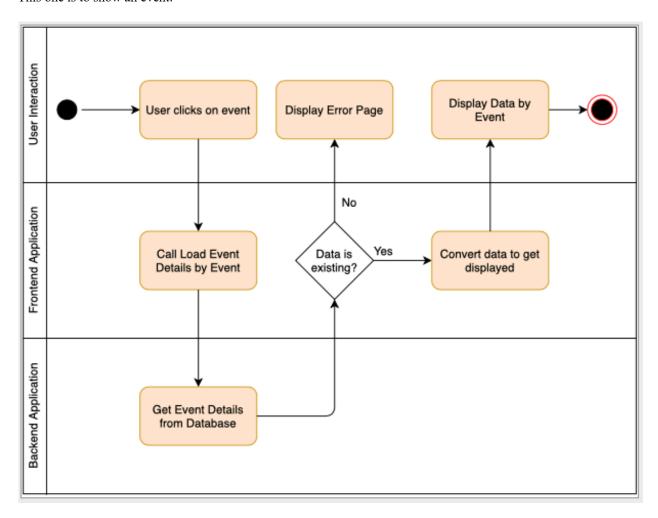
Evendo	Version: 1.0
Software Architecture Document	Date: 30.06.2020

This one is about to create a TODO for an event:



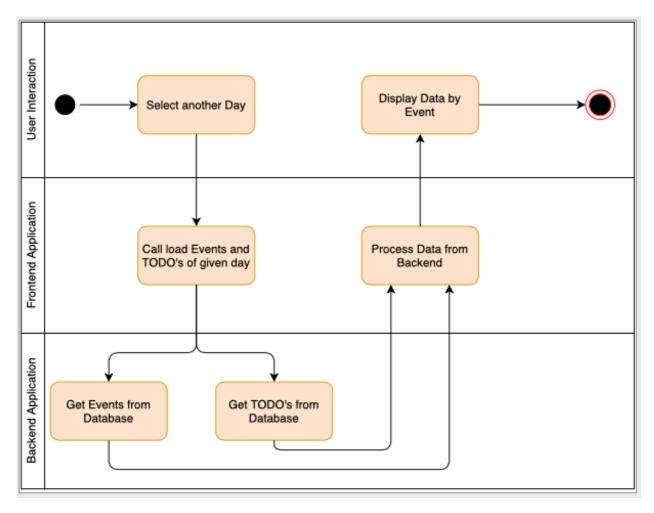
Evendo	Version: 1.0
Software Architecture Document	Date: 30.06.2020

This one is to show an event:



Evendo	Version: 1.0
Software Architecture Document	Date: 30.06.2020

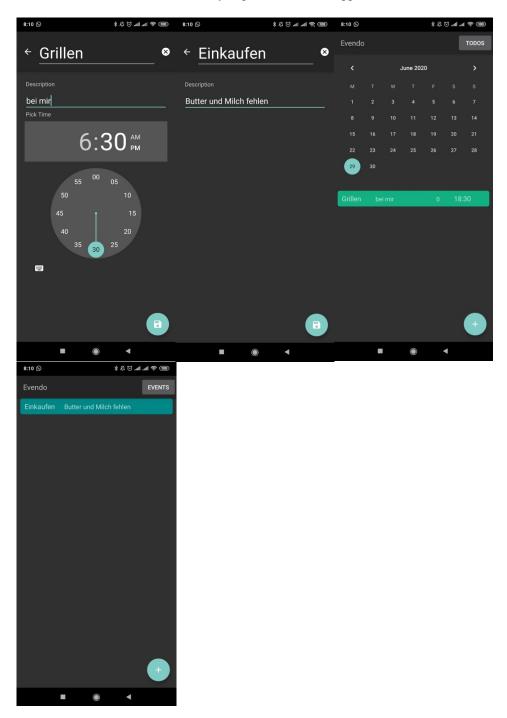
The last one is about to change the date:



Evendo	Version: 1.0
Software Architecture Document	Date: 30.06.2020

4.1 Use-Case Realizations

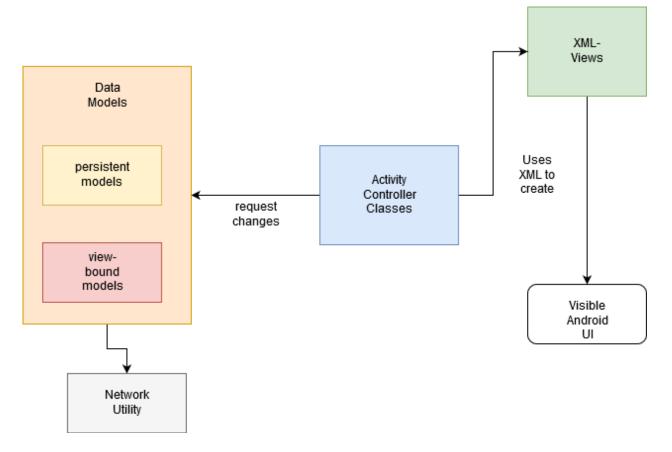
All our Usecases are currently implemented in our app. Have a look at it:



Evendo	Version: 1.0
Software Architecture Document	Date: 30.06.2020

5. Logical View

5.1 Overview



Evendo	Version: 1.0
Software Architecture Document	Date: 30.06.2020

5.2 Architecturally Significant Design Packages

Event	
- name : String	
- description :	
String	
- date : DateFormat	
- reminder : String[]	
- time : timeFormat	
+ getName() : String	
+ setName(String)	
+ getDescription():	
String	
+ setDescription(String)	
+ getDate(): DateFormat	
+setDate(DateFormat)	
+ getTime(): timeFormat	
+ setTime(timeFormat)	
+ getReminder():	
String[]	
+ setReminder(String[])	
Hear	





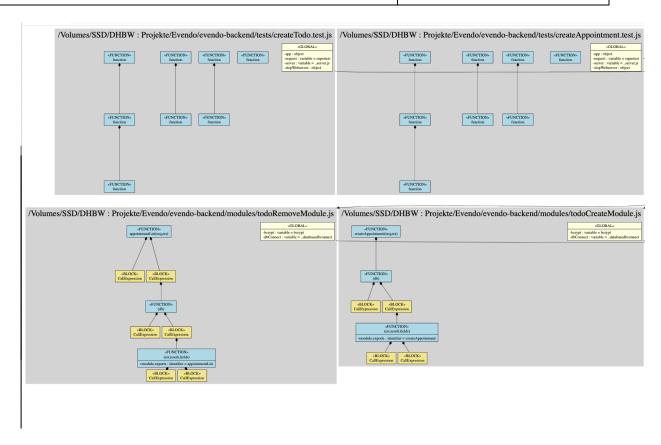
Calendar	_
- name : String - description : String - events : Event[]	
+ getName() : String + setName(String) + getDescription() : String + setDescription(String) + getEvents() : Event[] + addEvent(Event) + removeEvent(Event)	

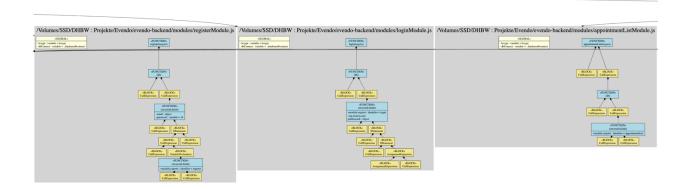
5.2.1 Overview

Because this image is so large we had to split it up into 4 Images, those should be read like a 400% width horizontal image. Otherwise please check our .svg in our Backend Repository: https://raw.githubusercontent.com/NiclasSchmuck/evendo-backend/master/overall_diagram/struct.svg

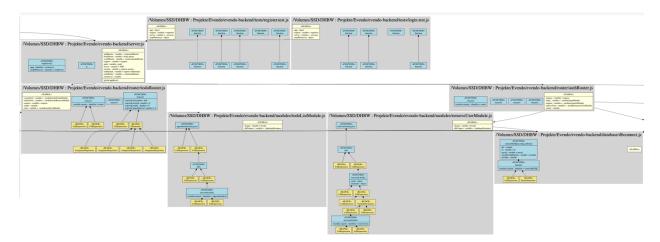
The following Overview is for the Backend:

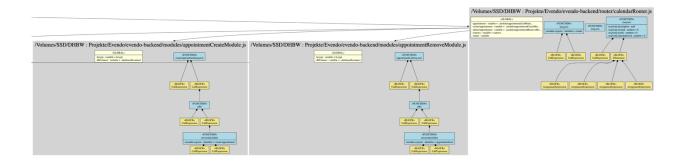
Evendo	Version: 1.0
Software Architecture Document	Date: 30.06.2020





Evendo	Version: 1.0
Software Architecture Document	Date: 30.06.2020





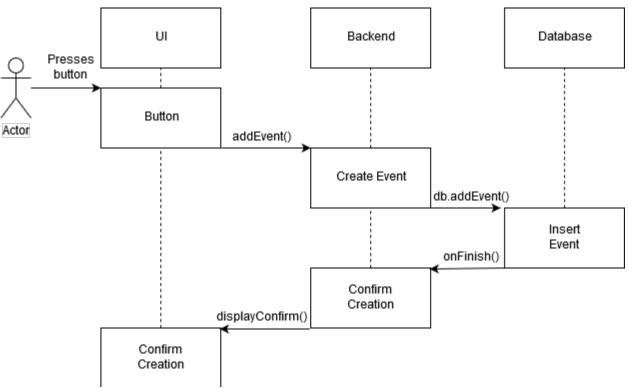
Evendo	Version: 1.0
Software Architecture Document	Date: 30.06.2020

This overview is the class diagram of our Frontend app:

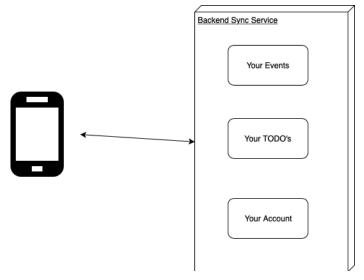


Evendo	Version: 1.0
Software Architecture Document	Date: 30.06.2020

6. Process View



7. Deployment View



Evendo	Version: 1.0
Software Architecture Document	Date: 30.06.2020

8. Size and Performance

The software should be scaleable up to 1000 parallel users watching, 100 users doing actions and up to half a million registered users.

Performance: Response Time should be lower than a second during 100% cpu usage.

9. Quality

The Software should look great, the design should be intuitive, and the user interaction should be great. From our point, the code design is important for further development. From those parameters we will extract our resulting quality.