Product overview: A glimpse of the path ahead

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ABSTRACT

This document is an attempt to put forward the tentative system architecture of the product - Pocket Midwife website development. An important point that the reader has to keep in mind is that this is not a concrete and precise architecture but an overview of the same. The design and details will evolve as the project proceeds forward. In this document, we have defined the access points but we have not yet mentioned the name of the tools and systems that we will use as those may change in a few days. Our main goal is to make sure that we use open source and free tools to build this product.

Introduction

We aim to follow the model, view and control structure in this project. The client interface is the view, the data storage schemes makes up the model and control is the code that will act as the bridge between the entities involved. We also aim to follow data security practices as this product might deal with sensitive data.

Architecture overview

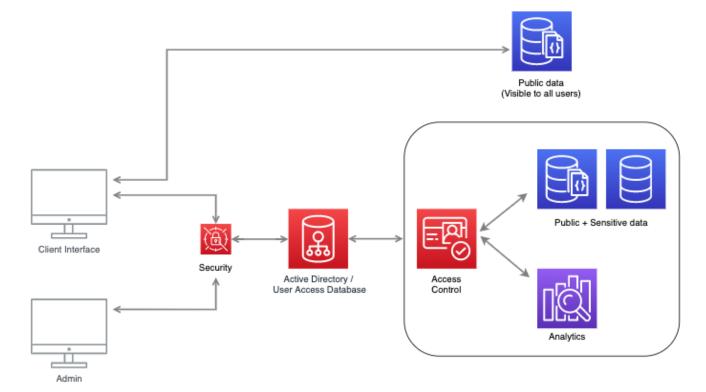


Figure 1. Entities and data flow of the product

Client Interface

This is the view of the client i.e. the page that will be visible to the client.

Types of clients:

- Guest
- Registered

Tentative tools to be used:

- HTML, CSS (Frontend)
- Javascript (user events handling)

Admin

This is the admin gateway. This will have more access than the users. Crucial data regarding users can be accessed using this page.

Tentative tools to be used:

- HTML, CSS (Frontend)
- Javascript (user events handling)

Security

This involves the security measures that will be taken to protect the privileges and interests of different types of users.

Public database

This data will be available to all types of users. This includes the public website data and information regarding the product and organization. We plan to look into NoSQL document driven database to find if it can make our architecture more flexible and scalable.

Access control

This will involve the backend server code and will define which user has what data access rights and privileges. Tentative tools to be used:

- Any popular opensource SQL/NoSQL DBMS
- Any suitable server side language of our choice.

Analytics and SEO

We plan to record user behaviour in a secure way in order to determine useful statistical inferences from the data using popular data mining algorithms. We also then aim to use popular keywords and other optimization strategies to move up in the SEO game.

Mobile Friendly Website

We aim to follow standardized stylesheet rules on the frontend side to make the website mobile friendly. The final aim is to make the interface device independent.