

Introduction

Problem

One line of Magellan Health's Business is the **Employee Assistance Program (EAP)**. The EAP is a set of services that is offered by an employer to their employees. Employees, or Magellan members struggle to utilize the EAP services for multiple reasons. This can largely be attributed to a **lack of direct communication** between Magellan and their members, and a **lack of mobile accessibility**.

Approach

Create a **native application** version of Ascend using **ReactNative** that will be available on **Android** and **iOS** mobile devices. Provide a **better engagement** platform, **direct contact** with members and an accessible, more **tailored experience**.

Project Goals

Recreate the Ascend website as a native application prototype using the **ReactNative framework**, targeting **Android** devices initially. In creating the prototype, meet the soft requirements of the **Approach** and implement the features currently present on the website version of Ascend, in a way that **preserves functionality**, while **leveraging the full benefits** of a mobile application. Additionally, find ways that the product might be improved for all platforms with mobile design in mind.

System Architecture

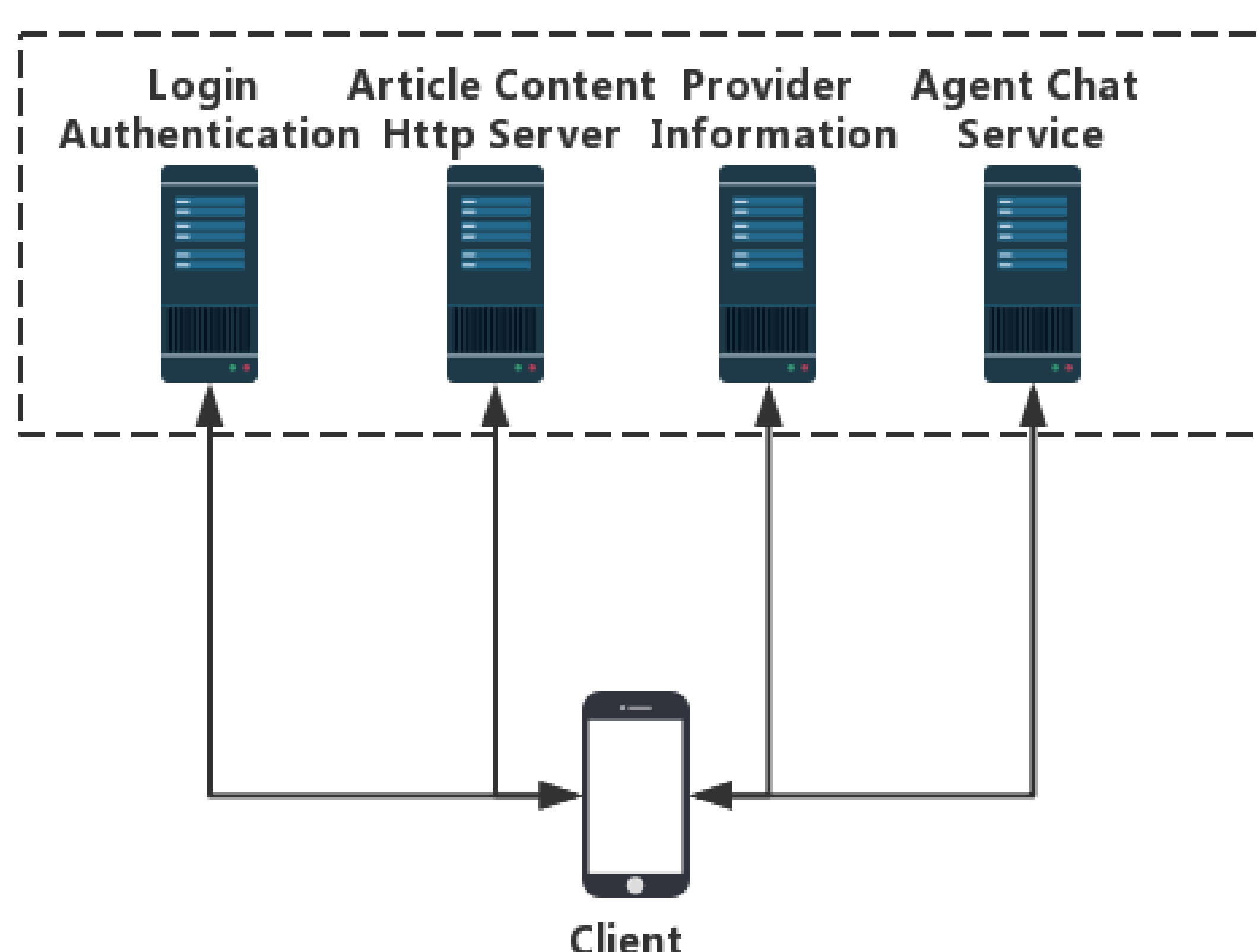


Figure 1: System Archetecture Diagram

We use client-server architecture. There are four servers:

Login Authentication Server

Authenticate user login information from **Okta API**

Article Content HTTP Server

Host the article contents so the content can be easily changed by updated server contents. **Umbraco CMS**

Provider Information Server

Client user REST API to retrieve the provider's information from Magellan servers

Agent Service Server

Member service provided by **LivePerson**; API Connection

Ascend Mobile Client

Native application, written in JavaScript/React.js, for the ReactNative framework and Android OS.

Software Analysis and Design

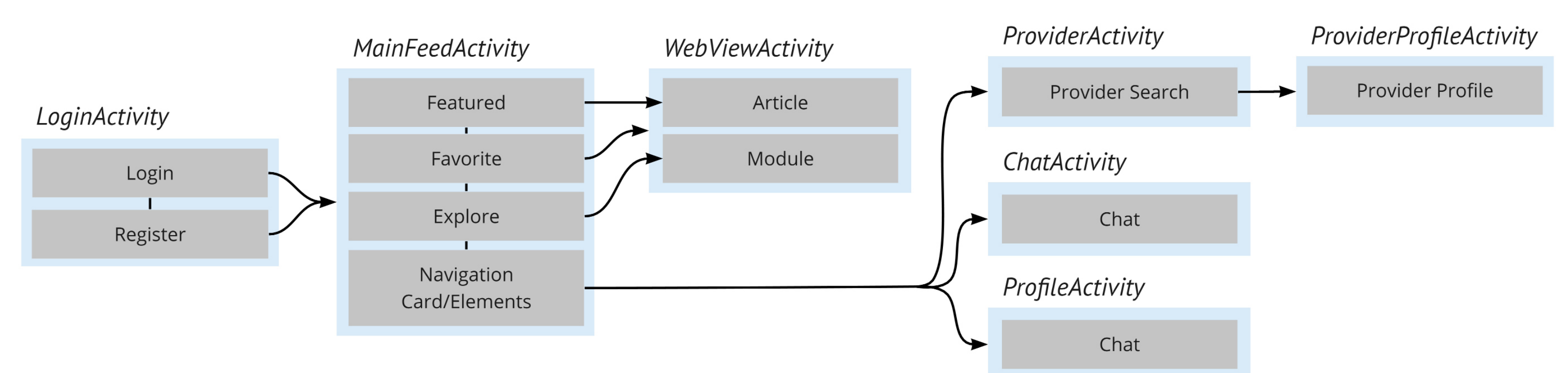


Figure 2: User Interface / Activity Flow Diagram

MainFeedActivity provides access to all content and tools in the app, serving as the first activity following login. Following use of either ChatActivity or ProviderActivity, a tab will appear for easy navigation between EAP content and provider access.

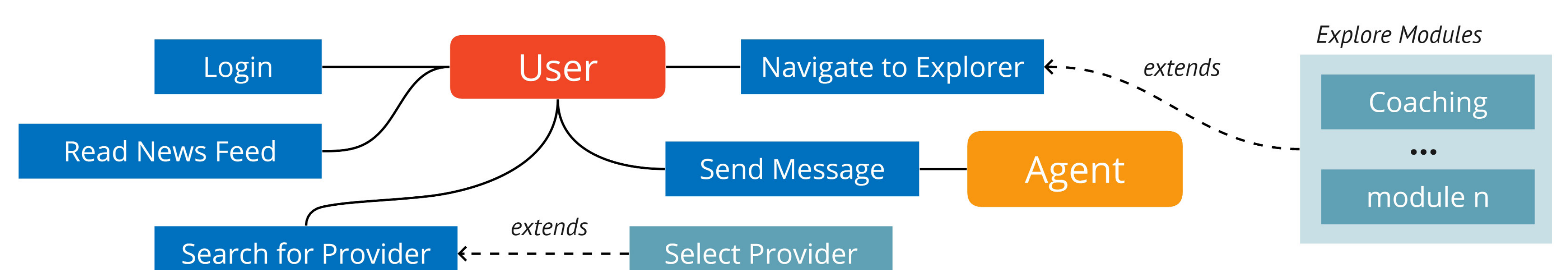


Figure 3: Use Case Diagram

News Feed - Users can view the current trending articles, featured modules and favorites.

Explorer - Users are able to explore different kinds of articles by specifying the category.

Chat with Agent - Users are able to chat with the member service agent via the app.

Login - Users finish authentication by login in with usernames and passwords.

Provider Search - Users are able to retrieve a list of providers by specifying the search criteria (distance, zip code and providers list) and they can view the detailed contact information of each provider.

Significance

- The current app provides a better look and feel **experience on mobile** to engage users in exploring Magellan's services and fully using their benefits.
- Provides an easier **direct communication** between users and Magellan.
- Provides more geographically relevant provider information by leveraging device **GPS and IP information**, unique to the mobile experience.
- Use of ReactNative and pure React.js so the app can be very **easily deployed** to the iOS platform, with no need to write both Swift and Java/Kotlin.
- **Value added** to product as a means of product retention, adoption and adherence increase.

Future Work

Architecture

- Optimize localization and provider search for speed and accuracy.
- Connect to LivePerson chat API.
- Use GCM on Android to push custom messages to users.
- Implement register feature.

User Experience

- Add configuration and styles for iOS
- Animation and Icon Update
- Implement newest features of site
- Add favoriting and history functions to MainFeedActivity

Acknowledgements

Special thanks to Prof. Murthy Narasimhan, Caylan Hord and Brooke Martin for initiating the project and providing requirements information, and to Sofiane Sirajeddine and Ashish Chatterjee for their technical insight and expertise.

