



YANS - Yet Another News Service

A NEWS application powered by Microsoft Azure AI and Xamarin

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Problem statement

A mobile based news application that uses cutting-edge technology to recommend the most relevant and interesting news individually to each user.

Concept

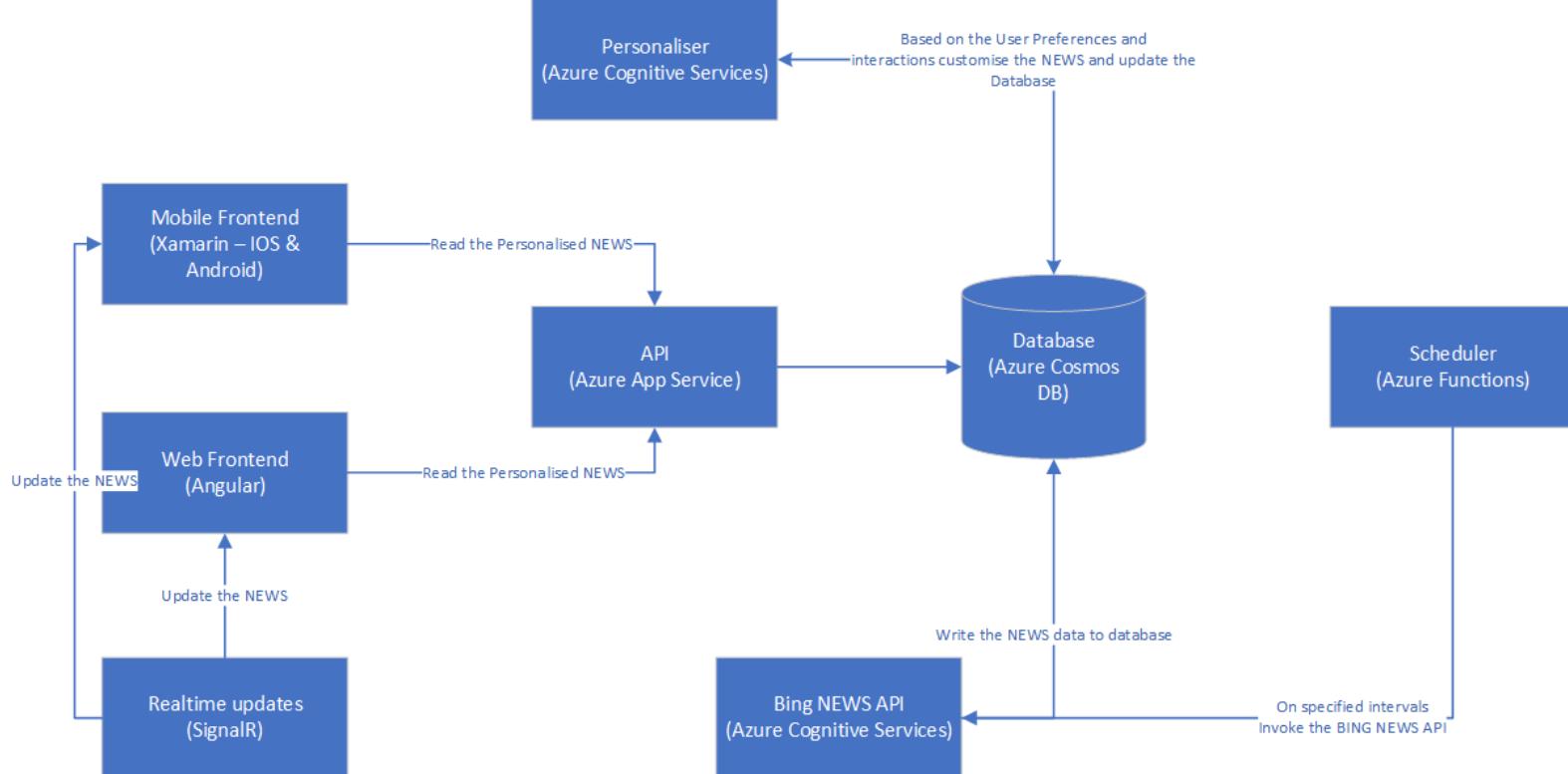
This application uses Microsoft Azure Bing News API for the NEWS contents. On backend a scheduled task will be fetching the content from Bing NEWS Service and updates the database. First time users can choose the categories and favourite topics, so that the NEWS will be customized for them. Later based on their interactions and engagement on the platform - they will receive personalized NEWS.

Technology Stack

This application built using ASP.NET Core and Azure AI Services.

1. Azure Bing NEWS API
2. ASP.NET Core and C# for APIs
3. Angular
4. Azure Personaliser API
5. Azure Cosmos DB

Architecture



Modules

There are 6 main modules in this application.

1. Frontend.
2. API.
3. Scheduler.
4. Personaliser.
5. Database.
6. Authentication

Frontend

- Mobile frontend - The mobile application built using Xamarin and C#. Application can be deployed to IOS and Android stores.
- Web Frontend - Web front end built using Angular, PWA support enabled. With PWA support application can be used for users with less bandwidth.

API

- API layer will help both mobile apps and web app to get the NEWS.
- Built using ASP.NET Core 3.1.
- Realtime communications offered by SignalR

Scheduler

- Azure Function with time trigger used as Scheduler - this module will interact with the NEWS service and fetch the news. Later the NEWS is pushed to Database.
- Built using C# and .NET Core.

Personaliser

- This module is responsible for Personalising the NEWS for the users based on their existing platform behaviour.
- Built using Azure Personaliser Service.

Database

- Currently Azure Cosmos DB is used as database.
- All the NEWS will be pushed to the Database from Azure Function.
- Personaliser module personalises the content and push the data to users.

Authentication

- Authentication is implemented with Social Media Logins.
- It is built on top of Azure Active Directory B2C.