

KnowPool

Learn & Share

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1. PROBLEM STATEMENT

For students or people who aspire to be Programmers, Developers or simply learn, think that there is a lot of great study material easily available related to programming, computer and internet in general. However, this material is scattered on various platforms, making it harder for people to get the best content at one place.

For people who know about the subject, but still cannot share their knowledge easily or are not sure if that will reach the needy ones, a platform is needed which gives them equal chance and let them share their wisdom with all developers/students without any hassle.

2. SOLUTION

KnowPool is an innovative platform where the users can share their programming expertise with the other learners easily via the means of professional blogs and videos. Personally, we think that there is a lot of great study material related to programming, computer and internet in general but is not delivered as it could be.

Various people have various blogs/YouTube Channels and some have dedicated websites for the same. However, it's hard to keep up with these various platforms simultaneously. Plus, there's another factor of switching to various different websites and then getting confused with the content, because of how the data is represented on different platform(s) is different.

This creates an unnecessarily complicated Architecture consisting of Modules or Silos. Thus, instead of creating another Silo of this complex hierarchy, we aim to unify and simplify this problem.

3. HOW OUR PLATFORM WORKS?

Currently, if you want to learn a particular skill, you go through various websites, or sources to find content with good ratings. Various platforms have various judging criteria for judging the content. Sometimes, there are people who want to share their knowledge about a certain topic, but they find it cumbersome to create a blog/channel/website manually to place their content. We

wish to give these users a way where they don't have to go to such lengths.

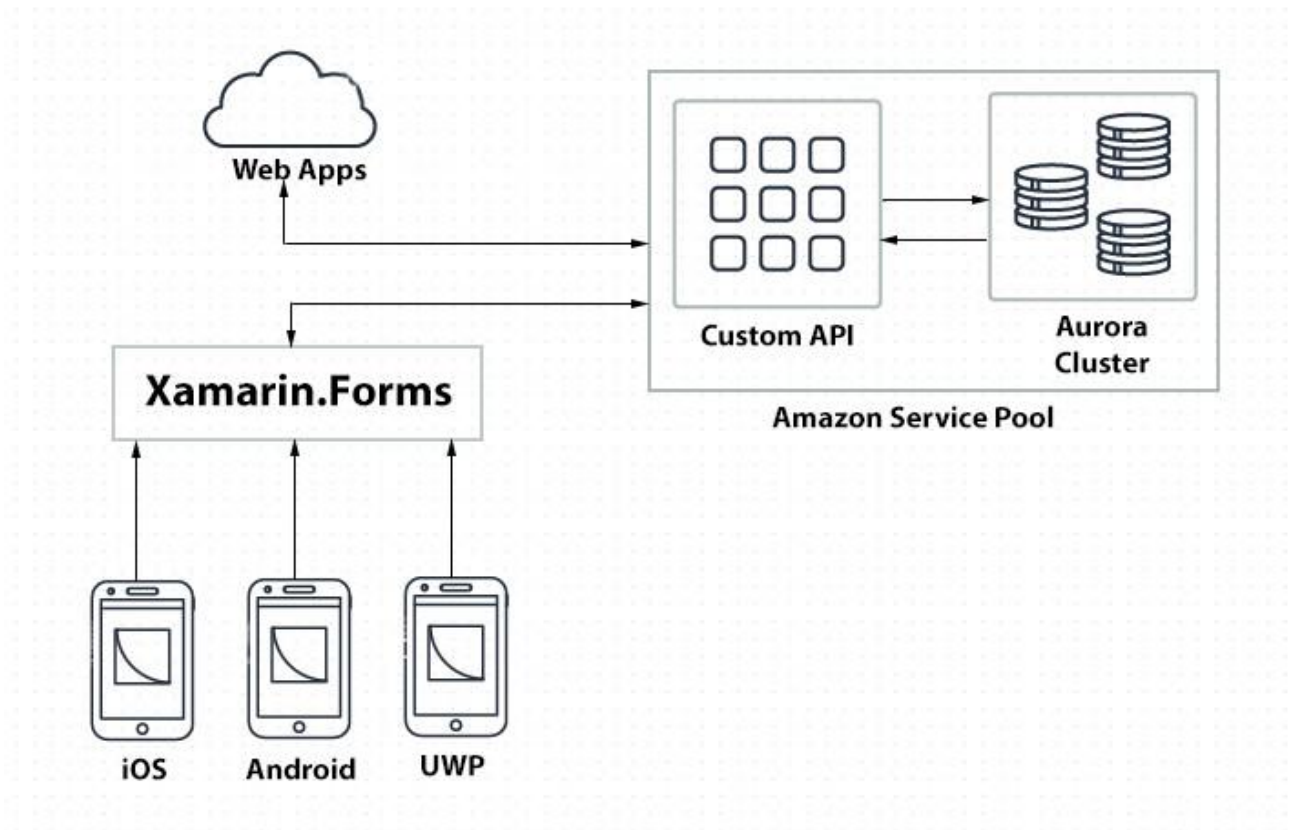
Whoever wants to share their programming knowledge, they can simply sign up on our platform as a "instructor" and start writing blogs or sharing their tutorial videos on our platform. This way, anyone can teach whatever content they have superior skill(s) in.

The learners will have the ability to rate/comment/share those posts. This will also give the new learners a unified review about a particular content source. We also wish to keep this platform completely free, because we ourselves as students believe that education can be free.

However, we will be having a "donation" section for maintaining server and architecture costs.

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. Platform Architecture



. FUTURE SCOPE

- Website Implementation.
- Social Logins
- Google Accessibility Implementation for Visually-disabled.
- Rebuilding the user interface, for better, faster & smoother user experience.

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- Adding functionality to create and host videos. Can be achieved by Amazon S3/CloudFront.
- Adding ML for content moderation.
- Applying AI to recommend courses to users based on their previous views.

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. TECHNOLOGY STACK

6.1 Front End Development:

- **User Interface design:**
 - Android XML (.AXML)

6.2 Back End Development:

- **Main programming language:** ◦ **C#** - to develop base functionalities of proposed application.
- **User Management :** Okta
- **SMS :** Twilio
- **Email :** Sendgrid
- **Basic scripting languages:**
 - **PHP** – For Creating Backend APIs

6.3 Frameworks

- **Xamarin Framework**– to develop native portable Android Application in **C#**
- **.NET Framework**– to use Microsoft's Visual Studio and **C#** basic packages.

6.4 Packages:

- **C# Basic Packages**– provided by Microsoft.
- **Newtonsoft** – To parse JSON data.

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6.5 Application Programmable Interfaces (APIs):

- **Custom-built PHP APIs** – To parse Database Response.
- **YouTube APIs** – To Embed Videos. • **Vimeo APIs** – To Embed Videos.