

Amazon Kindle Arch Challenge

The Amazon Kindle is a series of e-readers designed and marketed by Amazon.

The Kindle product needs to have at bare minimum following functionality

1. **Publishing:** Publishers could include small and big publishing houses who have a lot of content already created. They are the ones who would tie up with Kindle and publish all their content, in bulk, on the Kindle platform.
2. **Authoring:** Individuals who are authors would be authoring for Kindle platform. They need to be able to create content on their laptops/desktop and publish it on Kindle platform. It can happen via
 1. **Send-to-Kindle:** This service offers a way for users to store their content (html pages, word documents, images, media etc) to their personal library at Kindle. This can happen via users sending their content to Kindle over email and via a desktop app that syncs the contents.
 2. **Web Interface:** The users can use some form of web interface to upload their content.
3. **Consumers:** The consumers are those who own a Kindle device and consume content from Kindle. The consumption is “reading” and can happen when the consumer purchases a content or rents it out. Consumers can follow other consumers to see their activities (books purchased, read, rented etc)
4. **Store:** A Kindle store is a place where consumers can browse for content. The store also provides following
 1. **Search:** Anyone should be able to search across Kindle either by title or the content
 2. **Recommendation:** The Kindle platform recommends interesting content to consumers
5. **Analytics:** The authors and publishers would want *interesting analytics* on their content.
6. **Monetization:** The platform allows monetization. Certain authors and publishers who have more than 1,00,000 views on their content get a certain amount per view (ex: \$0.05 per view when view exceeds 1,00,000).

~~In about 2 hours, you would need to architect the entire Kindle platform.~~ You would need to come up with

- All components that are essential for the above functionality. The data flow, relationships between them
- Broadly the database tables, their schemas and relationships between them.
- Because this is Kindle, the scale is also pretty huge. Don't miss out on it.
- Deployment strategy.

Make reasonable assumptions about the platform from what is already known to you/available generally about Kindle. Some assumptions/scenarios are

- Kindle content will be read on Kindle devices, iOS, Android, Mac, Windows apps
- Kindle content could include all word type (MS Word, OpenOffice, Apple Pages etc) formats, all images format, all PDF
- Learn more about Kindle at https://en.wikipedia.org/wiki/Amazon_Kindle