ONLINE, DISTRIBUTED, AND OPEN SOURCE DEVELOPMENT OF SLIDEWIKI OPENCOURSEWARE SYSTEM IN AN ACADEMIC AND MULTIDISCIPLINARY CONTEXT INTRODUCES CHALLENGES RELATED TO:

- COMMUNITY DEVELOPMENT
- SEPARATION OF CONCERNS
- COORDINATION OF GEOGRAPHICAL DISTRIBUTED RESEARCHERS AND DEVELOPERS
- VARIETY OF PREFERRED AND NECESSARY PROGRAMMING LANGUAGES AND RUN-TIME ENVIRONMENTS

THE SLIDEWIKI MICROSERVICE ARCHITECTURE ALLEVIATES ABOVE CHALLENGES.

Users via webbrowser

RESTful API's
- GET /deck/{id}
- POST /deck/{id}/fork
- PUT /deck/{id}/fork
- DELETE /group/{id}
- PATCH /group/{id}/decks

Similar to CRUD in Databases

Supports interoperability

Clear subsystem boundaries
Separation of concerns + minimize code dependency
Different programming languages
Scalability + extendibility

Easily add or reuse an existing system or microservice

python
java
node.js
node.js

Runs on
Server 1
Runs on
Server 2
Runs on
Server 3

Different runtime environments + scalability

Collaboration
Community development

Extendibility + reuse

Photos of SlideWiki DevOps Team

Overview of SlideWiki Microservice Architecture
(by Ria Medendorp)