Quality Attributes of a MOOC Platform
Platform Selection

- Which platform should I use to run a MOOC?
Platform Selection

- Methodology
  - Identify requirements
  - Compare available solutions
Quality Attributes

- Many quality attributes may be desired from a MOOC platform
- Focus would be on
  - Scalability
  - Usability
  - Availability
  - Performance
  - Interoperability
  - Configurability
Scalability

- Capacity: How many users can the platform handle?
- Scalability: Ability to increase capacity using a cost-efficient strategy
Scalability

- MOOC requirement: How many students?
  - Hard to predict
  - Registered users vs logged-in users
  - Events dependent: live sessions, exams
- Best strategy: Plan for 300,000 users
  - Won't be cost-effective as higher capacity means higher operational cost
- What do we want?
  - Scalable platform
Usability

- Easy to use, efficient to use
- For students:
  - Course navigation
  - Access on mobile devices
    - Adaptive & responsive themes
  - Interactions
- For teachers:
  - Easy to create courses
    - Drag&Drop features
Availability

• Up-time of the service

We're Having Server Trouble
Getting you back to your courses is our top priority!
Availability

- In a MOOC platform
  - Geographically distributed users – different timezones
  - Better availability during live chat sessions, exams
  - Hard to achieve as any software is prone to failures
- How does the platform handles failures?
  - Quick fault-detection and quick fault-recovery
  - 24X7 technical support
- Overall availability would also depends upon the hardware infrastructure
Performance

- Response time
  - During chat sessions
  - During heavy load
- Low bandwidth connections
  - Low quality video streaming
- Overall performance will also depend upon hardware infrastructure
  - Power of hardware resources
  - Location of hardware resources
Configurability

- Flexibility to configure the services
  - Change the process of content delivery
  - Branding
- Emails
- Restrict access
Interoperability

- Re-usability of course content
  - Import from existing platform
  - Export to standard format
Thank You