Educating for the Future
Working Group Kickoff
Meeting Notes

• These are initial thoughts
• Everything in these slides is up for discussion
Educating for the Future

• WG Mission

To develop frameworks by which to educate the PhUSE community at large. The frameworks will be designed to educate the community on the importance of topics where we feel we have gaps, the details of the topics themselves, and how they can be used to drive innovation in the industry.
Educating for the Future

• What it is
  – Repositories of educational resources/information
  – “The beginning of the journey”
  – Self-service system

• What it is not
  – A classroom
  – A forum where the project members are doing the educating
Data Science

• **Trends**
  – Massive innovation related to all things having to do with data
  – Languages: Python, R, Javascript, Scala

• **Where we are as an industry**
  – Things are done more or less the same way they were done 20 years ago
  – Languages: SAS (with a little bit of R)
  – “Data admins”
Machine Learning and AI

• **Trends**
  – $14B+ in investment in 2016
  – Significant effort on solving “foundational problems”
    • Language, knowledge, human interactivity
  – Ubiquitous presence
    • Autonomous vehicles, AlphaGo, Google Translate, Siri, Alexa, etc

• **Where we are as an industry**
  – No cohesive activity or direction
Design Thinking

• Trends
  – Research
    • Understanding innovation in human systems
    • Circular design, risk, and failure to drive better outcomes
  – Broad adoption at major corporations
    • IBM, Capital One, Marriott, Intuit, Philips
  – Emphasizing openness and minimizing ego

• Where we are as an industry
  – Minimal relative innovation
  – Highly linear systems
  – Extremely low tolerance for risk and failure
Other topics

• Is 3 good or do we need more?
• Hyper Agile Software Development and Deployment
• Databases and data representation
• User focused application development
• Suggestions??
Structure and Activities

• Project leads
  – Maintain topic area repo
  – Ensure topic flow and messaging
  – Coordinate meetings and internal comms
  – Liaise with WG leads

• Project members (and leads)
  – Attend meetings
  – Scour for and contribute repo content
  – Interact with the learner community
Next Steps

• Pick project topic areas
• Volunteers for project leads
• New project requests (NPRs) to the CSS Steering Committee
• Planning for conferences
  – CSS (Silver Spring, March 4-6)
  – Connect (Raleigh, June 3-6)
• Content aggregation and repo development
All other topics