Mines Crowdsourcing System (MCS) 1.0
A Crowdsourcing Web Application for
Supporting Research at Mines and the Beyond

Client:
Chuan Yue (chuanyue@mines.edu; BB 330B)

Project:
Crowdsourcing systems (e.g., Amazon Mechanical Turk, or MTurk) enable job requesters to post Human Intelligence Tasks (HITs) for crowd workers to complete and get paid. They are widely used by researchers, companies, and governments to perform important studies such as behavior related ones and respond to crises such as natural disasters. MCS is a crowdsourcing system that aims to initially support the research work at Mines and the region, and later broadly support job requesters and crowd workers over the Internet.

In this project, students will prototype the first version (i.e., v1.0) of MCS using modern Web development and security protection techniques. MCS1.0 should have the basic features such as job posting, searching, and submission of a typical crowdsourcing system. It should have the basic security and privacy protection features such as user authentication and access control. It should be developed using modern Web techniques and should be scalable.

Primary Goals:
- Design, implement, and evaluate the basic webpages of MCS1.0
- Design, implement, and evaluate the basic database of MCS1.0
- Design, implement, and evaluate client-side and server-side functionality to support basic job posting, searching, and submission features of a crowdsourcing system

Secondary Goals:
- Design, implement, and evaluate client-side and server-side functionality to support basic account registration and management features of a crowdsourcing system
- Add basic password or Single Sign-On based user authentication features to MCS1.0

Stretch Goals:
- Add basic access control features to MCS1.0
- Add basic quality control mechanisms to MCS1.0

Technologies:	Team Size:	Location:
• Web development frameworks such as Angular or Ruby on Rails • HTML/CSS/JavaScript • SQL	3~5	Mines Campus