

Review For Midterm # 2

- Approximately 20 questions
- 50 minutes*
- Exam administered via Moodle
- 10 questions per page (to reduce calls to Moodle)
- Multiple choice, fill-in, matching, True/False
- Open book, open notes, open internet
- You are being trusted to do your own work. No collaboration allowed.
- You may take the exam any time between 8:00 a.m. and 5:00 p.m. on Monday, December 3 **
- Once you start the exam, it will close automatically when the timer is up
- Correct answers will not be available until the exam closes at 5:00 p.m.

* Certain students are allowed accommodations for extended time

** Unless exceptional arrangements have been made

Review For Midterm # 2

- Web Services
 - http, xml, json, api
- REST & SOAP
 - REST is an architectural style
 - Stateless, layered, cacheable, scalable
 - Uniform interface methods (http), data format (json, xml)
 - Approximately 70% of public APIs are restful
 - SOAP is a protocol
 - Relies on XML
 - Requires WSDL
 - Older, and Less flexible than RESTful web services

Review For Midterm # 2

- Software and the Law, Software as IP
 - How do you determine who owns Intellectual Property
 - What are the differences between
 - Copyright
 - Patent
 - Trademark
 - Trade secret

Review For Midterm # 2

- Cloud Computing
 - What drives an organization to use the cloud?
 - Private Cloud versus Public Cloud
 - Cloud providers: AWS, Google, Microsoft Azure, IBM
 - Advantages/Disadvantages of using the Public Cloud
 - Amazon's cloud service's growth & revenue
 - IAAS, PAAS, SAAS – what are they?
- Heroku – PAAS offered by Salesforce
 - To develop and deploy apps in the cloud

Review For Midterm # 2

- **Software Testing**

- The costs of poorly tested software
- Different Types of Testing
 - Unit, Regression, Integration, UAT, Load Testing
- How a written TEST CASE drives UAT
- Automated Unit Testing – Framework like PyUnit
 - Eases Regression testing
 - Relies on “assertions”
 - Eases Code Refactoring

- **TDD – Test Driven Design/Development**

- No code is written until its unit test is written