Trillium Grant Management

Team Ulysses
Agenda

- Our Product
- Design
- Demo
- Refection
- Final Project Status
Who Is Trillium?

● Non-profit organization based in the Greater Rochester Area
● Provides a variety of health care services to Geneva/Bath/Rochester areas
● Most funding is based on grants received from Federal, State and local authorities

http://trilliumhealth.org/
Goals:

- Grants

Tasks

- Task #1
- Task #2
- Task #3

Documents
Goals:

● Workflows
● Audit Trail
● Authentication/Authorization
● Outlook Integration
● Status Emails
Design

Usability

Security

Modifiability
Usability

“ease-of-use”

● Learnability
  o Will the users be able to adapt quickly?

● Efficiency
  o Will the users be able to perform tasks quickly?

● Satisfaction
  o Will the users feel pleasant when using the product?
Security

- Authentication of users via LDAP
- Authorization of users via session tokens
- Audit Trail
- Sanitization of Inputs
- User Roles
Modifiability

- **Client-Side**
  - Page scaffolding (incl. test scaffolds)
  - Lump related JS, HTML into modules
  - Serverless development mocks

- **Server-Side**
  - JPA Entity Manager
  - Interfaces and Implementations
  - Configuration files
Architecture

Controllers

Services

Controllers

Services

Data Access

Persistence
Architecture

RIT Software Engineering, ulysses.se.rit.edu

Trillium Intranet

Ulysses VM

- <<development>>
  - git
  - jenkins
  - Tomcat 7.0.56
    - <<component>>
      - tgm
  - <<development>>
    - redmine
  - <<development>>
    - reviewboard

builds origin/master

builds origin/release

deploys

deploys

Trillium Webapp Host

- <<development>>
  - jenkins

Tomcat 7.0.56

- <<component>>
  - tgm

postgres

phpmyadmin

mysql

Trillium Active Directory

- ad
Decisions and Tradeoffs

3rd Normal Form

Security > Performance
Testing

Strategy

- Acceptance/Manual Testing
- Usability Testing
  - SUS Metric = 85

Challenges

- Unit tests 39.5% @\texttt{Ignore’d}, 60.5% complete
- Manual testing only towards the end
Demo

http://ulysses.se.rit.edu:4567/tgm
What Went Well

- Good synergy with sponsor
- Code Reviews
- E-mail updates
What Didn’t Go Well

● Automatic deploys to Trillium didn’t happen
● LDAP research and integration
● Outlook integration hard to test
● Code integration overlooked
  ○ More unanticipated work during integration
Final Status

- Final handoff, demo, and training on May 15th
- Planned features we were unable to deliver
  - Task Templates
  - Sub-tasks
  - Automatic workflows
- Future goals
  - Recycling Bin
  - Document Tagging
  - User Proxy for administrators
Acknowledgements

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Questions?

That's all Folks!

Synergy!