WEB 321

Week 2 – Getting Started on a Project Using Agile and SCRUM

Topics

- SDLC
- Agile
- SDLC vs. Agile
- Executive Summary
- Request for Proposal (RFP)
- Business Proposal

Software Development Life Cycle (SDLC)

- 7 stages
  - Planning
  - Requirements definition
  - System design
  - Implementation
  - Integration and testing
  - Deployment
  - Maintenance

SDLC

- Project planning stage
  - Identify goals
  - Analyze competing or alternative software
  - Speak with users and stakeholders
- Requirements definition stage
  - Define new system requirements
  - Develop feature set for the new system
  - Consider audience, hardware, and software dependencies

SDLC

- System design stage
  - Design the user interface, class models, and database models
  - Compare the design to the gathered requirements
- Implementation stage
  - Creation of all software code, graphical, and multimedia elements
  - Compare the written code to the gathered requirements
- Integration and testing stage
  - Conduct full end-to-end testing of the implementation stage
  - Compare the results from testing against gathered requirements

SDLC

- Installation and deployment stage
  - The client/stakeholder approves the completion of the project and the system is made accessible to “live customers”
  - This is usually referred to as UAT Acceptance
- Maintenance stage
  - The running system is monitored and evaluated for modification
  - Bugs are identified, evaluated, and corrected
  - Performance is measured and server capacity is increased

Agile

- Interactive approach to the development of projects
- Iterative
- Emphasizes verbal communication
- Non-linear
- Development is broken into smaller “tasks” that are iteratively approved by the client and eventually merged to the main project
- Design/requirements are constantly “moving” and updated

Agile steps

1. During the requirements-definition phase, the client gives the development group whatever information is known about the functionality and requirements
2. During the development cycle, the design will be modified iteratively
3. Develop working prototypes that reflect the emerging design
4. Submit the prototypes for client approval
5. Revise the prototypes based on client feedback
6. Repeat steps 3-5 for additional parts of the system

Agile vs. Waterfall

Waterfall Model

- Lower development costs
- The client does not see working code until much later in the development process
- Easier to predict completion dates
- Late code charges are harder to implement

Agile Model

- Increases development costs
- Clients see working code through iterative approval stages
- Harder to predict completions dates because earlier interactions with clients may generate new features/requirements
- Code changes are easier to implement

Executive Summary

- Persuasive document that highlights the benefits of your company, product, or service
- Grabs the client’s attention and helps them make a decision quickly
- Identifies the need
- Identifies the solution and evidence
- Describes the “next steps”

Executive Summary

- Components
  - Opener
    - The opener should capture the reader's attention by focusing on the issue and results
    - In modern terms think of “TL;DR”
  - Problem
    - Identify the need/problem
  - Solution
    - Propose a solution
  - Evidence
    - Describe why you are the right person/company for the job
  - Call to action
    - Identify the next steps

Request for Proposal (RFP)

- Request for proposal
- The customer liked your Executive Summary and are requesting proposal of “how” the work will be completed
- Three Ps
  - Problem statement
  - Proposed solution
  - Pricing

Business Proposal

- Different than a business plan
- Focused on the 3 Ps
- Includes the executive summary
- Identifies the approach
- Communicates solution
- Outlines qualifications

Business Proposal

- Defines
  - Schedule
  - Time estimations
  - Pricing
  - Payment
  - Legal concerns
- Reiterates benefits