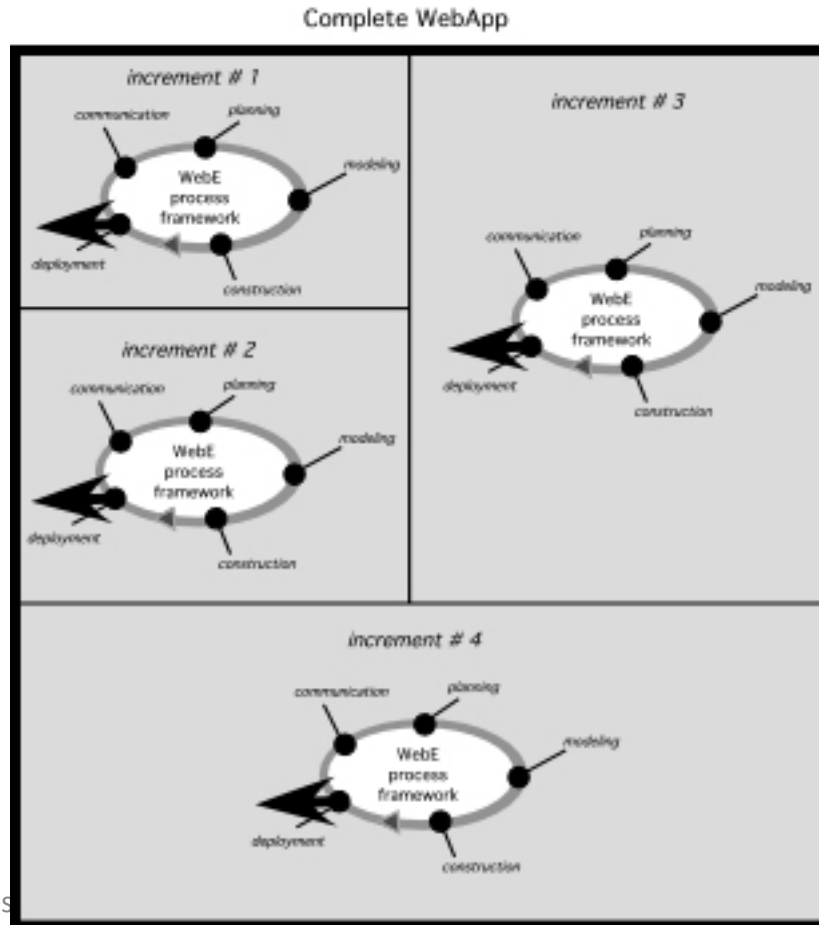


Chapter 3: *The WebE Process*

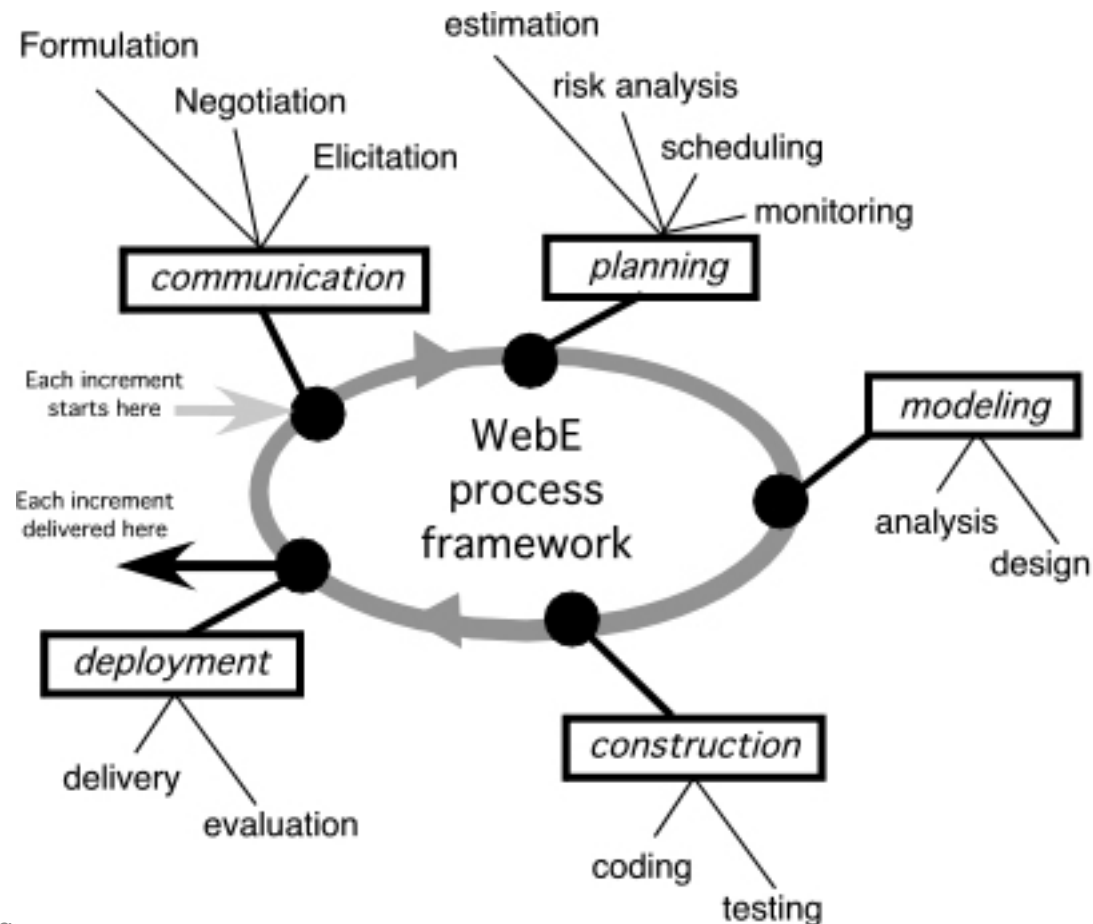
- The process must be agile and adaptable, but it must also be *incremental*
- Why incremental?
 - Requirements evolve over time
 - Changes will occur frequently (and always at inconvenient times)
 - Time lines are short
- Incremental delivery allows you to manage this change!

Incremental Delivery



Repeat the development cycle for each increment!

WebE Process Activities & Actions



These slides are designed to accompany *Web Engineering. A Practitioner's Approach* (The McGraw-Hill Companies, Inc.) by Roger Pressman and David

Conducting Framework Activities-I

- The first iteration (*Communication Activity Intent*)
 - define business context
 - establish overall requirements
 - create a set of usage scenarios
 - negotiate conflicting needs among stakeholders, and
 - from this information *derive the set of WebApp increments* that is to be delivered.
- Develop a broad outline of all components, recognizing that it will change

Conducting Framework Activities-II

- The second iteration (Initiate Communication activity for ***first increment***)
 - You’ve learned that the first increment is an *informational WebApp* and it must be delivered in *one week*!
 - You meet with stakeholders and later review your notes:
 - Logo and graphics—need aesthetic design.
 - One- or two-paragraph introduction.
 - CPI mission statement (file exists)
 - A word to visitors (someone will write this tomorrow)
 - Basic navigation bar will look like ...
 - About the company
 - Our offerings
 - Home security products (hierarchical at next level)
 - Monitoring services (a list)
 - Our Technology (the new sensor)
 - Contact us
 - Other issues:
 - Informational content will change over time.
 - This “home page” will be the navigation starting point for content and functions required for subsequent increments.

Conducting Framework Activities-III

- The second iteration (*Planning Activity*)
 - You spend a few minutes developing a plan
 - Day 1: Create a prototype layout (a model) of the WebApp.
 - Collect and review all existing CPI content and graphics.
 - Get stakeholder feedback on prototype, if possible.
 - Day 2: Using the prototype as a guide, begin construction of the increment.
 - Build navigation bar.
 - Lay out content areas.
 - Integrate graphics, links, etc.
 - Test all links for validity.
 - Review all content for completeness and correctness.
 - Day 3: FTP all files to (an existing) domain.
 - Perform navigation tests.
 - Deployment: Inform selected stakeholders that the increment is available.
 - Day 4: Poll stakeholders for feedback.
 - Make modifications based on stakeholder feedback.

Conducting Framework Activities-IV

- The next iteration
 - You've deployed the informational WebApp
- The *Communication activity* during this next *iteration* will identify the requirements (including content and functionality)
 - assume that the **second increment** delivers the capability to select and download product specifications and related information
- the process flow is restarted at the beginning, performing the *communication activity for this increment*.
- *The tasks you select to populate each framework activity for the increment may differ from the tasks performed for the preceding increment, but the overall process flow remains the same*

Revisiting the Framework Activities

- Recognize that a WebE team must refine and adapt these generic tasks to the problem at hand
 - And continue to refine them throughout the project

Umbrella Activities

- Background activities which occur in parallel with the main development activities
- Equally important to the success of a project
 - And so should be considered explicitly.
- Many umbrella activities can be defined
 - But only four are crucial for a successful Web engineering project:

Umbrella Activities

- **Change management.** Manages the effects of change as each increment is engineered, integrating tools that assist in the management of all WebApp content
- **Quality assurance.** Defines and conducts those tasks that help ensure that each work product and the deployed increment exhibits quality
- **Risk management.** Considers project and technical risks as an increment is engineered
- **Project management.** Tracks and monitors progress as an increment is engineered