CSC 402, Lecture Notes Week 5

Final Review of Phase 1 Pre-Release

Planning for Phase 2 Release

Requirements Process Details

I. **Weekly Lecture/Lab Overview**

A. **Monday:** Dress Rehearsal, Reredux

Weekly Lecture/Lab Overview, cont'd

B. **Wednesday:**

   Lecture:

   - Scanlon on management issues *(30 min)*

   - Roundtable discussion on Phase 2 development process *(20-30 min)*

   - Fisher on client interest levels *(5-10 min)*

Wednesday, cont'd

Lab:

- Rqmts + proto teams meet on devel process
    (M5 Tasks 1b and 2b, 30 min)

- Rqmts team on prioritization
    (M5 Task 1a, 30 min)

- Proto team on Friday class deployment
    (M5 Task 2a, 30 min)

Wednesday Lab, cont'd

- Wilkinson, Fong, Juszak (as available) on branding, marketing, and usability *(60 min)*

- Fisher, Pearson, Smith on VM status and forum admin *(10-15 min)*

- Fisher, Scanlon on Phase 1 release date *(5-10 min)*

Weekly Lecture/Lab Overview, cont'd

C. Friday:

- Fisher on UI design & usability *(30 min)*

- Mkt group on name & logo *(20 min)*

- Proto team in-class deployment *(60 min)*

II. **VM Issues to Be Resolved Before Release**

A. Current booting problem needs to be fixed.

B. `/media/thyme` ownership needs to be fixed for `mkhafate`, `jlokker`, `gfisher`, and `bjsmith`

III. Presentation and Discussion of Project Management Issues

A. Scanlon will present information.

B. Team members will discuss.

IV. Round Table Discussion of Requirements Process Details

A. Scanlon will lead.

B. Issues include:

   1. The current process seems to be too time consuming to produce mock-up screens.

   2. We need to consider alternatives for the the next release.

V.　Identifying Persona

A.　The term *"persona"* refers to how actors in the requirements scenarios are referred to.

B.　E.g., in the Calendar Tool example, there are these persona:

Identifying Persona, cont'd

1. *"The System"*
        -- the Calendar Tool software system

2. *"The User"*
          -- a registered Calendar Tool user

3. *"Administrator"*
          -- performs system admin functions

Identifying Persona, cont'd

C. For the scheduling tool:

1. "The System" =

    a. "The System"

    b. "Tempus" or other nickname

    c. "The Scheduling Tool"

    d. Something else

2. "The Scheduling Administrator" =

    a. "The Scheduler"

    b. Something else

3. "The User" =

    a. "Instructor"

    b. Something else

VI. **Systematically Addressing Clients' Needs**

A. Extract features from interviews.

B. Provide traceability from interview features to corresponding segments of the require-ments.

VII. Informal Feature Extraction

A. Any brand new features?

B. Any preconceived features to modify?

C. Any preconceived features to remove?

Informal Feature Extraction, cont'd

D. We have done some of this already.

E. Next week we'll get more systematic.

VIII. **Systematic Feature Extraction**

A. Process goes like this:

1. Identify features in transcript text & docs.

2. Place each feature in functional hierarchy.

3. Determine UI for each feature.

4. Write use case scenarios.

5. Generate walk-thru slides.

6. Create traceability links.

Systematic Feature Extraction, cont'd

B. Involves thorough analysis of transcripts.

C. Provides concrete evidence that we've con-
    sidered client input carefully.

IX. **Identify features**

A. Requires careful human interpretation.

B. Separate functional, non-functional features.

C. Idea is to spot software features within over-all interview conversation.

D. Features often prefaced with "We need ...", "We'd like ...", or similar language.

X. **Place in Functional Hierarchy**

A. As discussed in 308 notes, the command hierarchy is embodied in:

    a. UI command/data structure.

    b. Requirements organization.

    c. Existing prototype model.

Place in Functional Hierarchy, cont'd

B. An identified new feature may:

    a. fit into existing functionality,

    b. require creation of new functionality,

    c. require reorganization of functionality.

XI. Determine UI for identified feature

A. May covered by existing UI.

B. May require UI modification, upgrade.

C. May require new UI design.

XII. **Write Use Case Scenarios**

A. Core of the methodology.

B. We've reviewed many existing examples.

C. We've done started new scenarios in Phase 1.

XIII. **Generate Walk-Thru Slides**

A. This has been major focus in Phase 1.

B. Hopefully we can partially automate scenario-to-slide generation process.

XIV. Create Traceability Links

A. Define link points in transcripts.

B. Define target points in requirements.

C. Use HTML refs as concrete implementation.

XV. **Systematic Analysis Example**

A. Consider this statement from CSC client:

"We need to be able to mark certain blocks of time as unavailable for classes. For example, in the Computer Science department, we don't want to schedule any classes on MWF 1-2PM, at least not for tenure-track faculty."

Systematic Analysis Example, cont'd

B. General strategy for this particular case:

  1. Use existing instructor time pref UI to auto-fill read-only zero's in the time pref screen.

  2. Add a new scheduler command that allows time blocks to be marked as unavailable.

Systematic Analysis Example, cont'd

C. Regarding the *"at least not for tenure-track faculty"* aspect, we can:

   1. Add a data feature for instructors.

   2. Values: "tenure-track", "lecturer", "student".

   3. Provide time-block option to select who blocks apply to.

   4. ***Run these ideas by the client*** for feedback.

XVI. Process Details for Example Feature

A. Identified as "feature" by prose analysis, in particular the "We need ... " language.

Process Details, cont'd

B. Placement in hierarchy:

1. A new command is added somewhere in the scheduler's command repertoire.

2. Existing data values are used for displaying in instructor time prefs.

Process Details, cont'd

C. UI design has two aspects:

1. Addition of new command in proper place.

2. Addition of some form of explanatory help for instructor to know why times are auto-blocked out.

Process Details, cont'd

D. Scenario details and slides to be worked out.

E. Concrete example of trace links:

Process Details, cont'd

```
<strong><em>
We need ... for tenure-track faculty.
<br>
Links to:
<a href= "../../instructor-time-prefs.html
                #blocked-out-times">
    Instructor Time Prefs, Blocked Out Times
</a>
<br>
<a href= "../../scheduler-time-blocking.html>"
    Scheduler Blocking Out Selected Times
</a>
</em></strong>
```