**Midterm Report Guideline**

**Due date**: Mar. 20, 2020

The primary goal of this phase is on the construction of a software system ready for beta testing. The main objectives of this assignment include:

* Uncover any requirements that might have been missed during the design phase
* Implement a system for a beta testing
* Demonstrate all system functionality promised
* Develop test cases and plan

**RUP Application Development Team**

To successfully complete this phase your team must produce the following deliverables:

* An operational system (application) code
* Completed software test cases and plan to ensure that the software meets all user requirements
* Testing will be based on functional requirements (use cases) and be limited to system-level testing
* Properly determine the extent of testing since it may not be feasible to test everything due to time constraints
* If there are any changes after CS460 final report, submit
* Final versions of UML Class diagram(s), UML Sequence diagram or similar diagram
* Software Architecture document(s) or UML Component diagram
* The high level outline of a software system presenting major software components and their interactions
* Revised project plan that details tasks, schedule and resources
* The revised project plan must contain (1) the activities performed at the previous phases, who performed them, and start/end dates for each; and (2) the planned schedule for the next phase. For each activity and team member you must keep track of actual effort and record it to the nearest quarter-hour.
* Software deployment and delivery plan into the user’s environment, if applicable
* Other advisor-defined artifacts

**Scrum Application Development Team**

The primary goal of this phase is continued revision and grooming of the Product Backlog and delivery of the most important items in the Backlog.

To successfully complete this phase your team must produce the following deliverables:

* Updated Product Backlog
* Sprint Goal(s) and Sprint Backlog for next sprints
* Product Increment resulting from most recently completed Sprint
* Updated Software Architecture diagram (UML)
* Revised overall project plan that details number, duration and goal(s) of remaining sprints
* For each completed sprint
* Set of User Stories addressed by the sprint. Each user story should have a description of the user’s goal, effort estimate, priority and conditions of satisfaction, i.e., what needs to be tested.
* Sprint Backlog including day-by-day record of effort by each team member on tasks associated with each user story.
* Sprint Burndown Chart
* Note: Each user story must have at least one testing task associated with it.

**Research-focused team**

* An operational system (application) code
* Simplified test plan that demonstrates the software satisfies the major requirements
* Testing will be based on functional requirements (use cases) and be limited to system-level testing
* Properly determine the extent of testing since it may not be feasible to test everything due to time constraints
* If there are any changes after CS460 final report, submit
* Software design document/diagram for the software construction
* A list with simple descriptions of any data, resources, and/or software libraries used
* Completed introduction and literature survey section of the final report
* Experimental evaluation plan, if applicable
* Revised project plan that details tasks, schedule and resources
* It can be a narrative schedule, describing the steps for project implementation, final report preparation, and specification of tasks distribution among team members
* The revised project plan must contain (1) the activities performed at the previous phases, who performed them, and start/end dates for each; and (2) the planned schedule for the next phase. For each activity and team member you must keep track of actual effort and record it to the nearest quarter-hour.
* Other advisor-defined artifacts

**Submission**

* Compress source codes, libraries, and a project file to reconstruct an executable with other documents to a single file and submit on a USB flash drive or CD to your project advisor and course director.
* Project documents: Assign the file name based on the following format

“Assignment Document Name - Team Number”

Ex) Final Vision Document - Team#1

Final Use-case Model - Team#1

**Evaluation**

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| **RUP Application Development Team** | **Research-focused Team** |
| 70 An operational system code  20 Software test cases and plan  5 Software architecture document(s)  5 Revised project plan | 70 An operational system code  20 Completed introduction and literature survey section  5 Simplified test cases and plan  5 Revised project plan |
| **Scrum Application Development Team** |  |
| 50 Product Increment  10 Updated Product Backlog  10 Sprint Goals and Sprint Backlog  20 Completed Sprint artifacts  5 Software architecture document(s)  5 Revised project plan |  |