**Final Report Guideline**

**120 points Due date**: May 1, 2020

This is the last phase of software development process known as the product release. During this phase emphasis is on the implementation and test workflows to ensure that the software meets all user requirements, is free from defects and operates as expected in the user’s environment.

The goal of this assignment includes:

* Correct defects found in software testing
* Modify software to address any unforeseen problems
* Create user manuals or other support documentation
* Tailor software as necessary to operate at user site
* Software installation
* Provide user training

To successfully complete this phase your team must produce the deliverables listed below. Submit newly developed deliverables with other artifacts produced during the senior capstone courses.

**RUP Application Development Team**

* The software product (All developed codes)
* Testing artifacts (Software test plan, results, and evaluation summary)
* Project schedule built that details tasks, schedule and resources for entire project development
* Deployment diagrams, if applicable
* User manual
* Artifacts from the previous software development phases including
* Vision document
* Requirements document: Use-case model, UML Use-case diagram and specification, Supplementary requirements, if applicable
* Software architecture document: UML Class diagrams, UML Sequence diagram or similar diagram, UML Component diagram
* Project glossary
* Risk list and assessment
* Other advisor-defined artifacts

**Scrum Application Development Team**

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

* Product Release (Version of Product Increment deployed)
* Updated Software Architecture Diagram (UML)
* Updated Product Backlog (could be empty!)
* 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. Note: Each user story must have at least one testing task associated with it.
  + Sprint Burndown Chart

**Research-focused Team**

* The software product (All developed codes)
* Simplified testing artifacts (Software test plan, results, and evaluation summary)
* Project schedule built that details tasks, schedule and resources for entire project development
* Final report including Introduction, Literature survey, Description of methods, Experimental tests (optional), Results and analysis, Discussion / Future works, Bibliography
* Deployment diagrams, if applicable
* User manual or written instructions for general use of the software
* Artifacts from the previous software development phases
* Vision document (or problem statement)
* Requirements document: Use-case model with the use-case descriptions, Supplementary requirements, if applicable
* Software design document/diagram for the software construction
* Data, data description, resources, libraries used in the experiments, if applicable
* List of major technical risks of the project
* Other advisor-defined artifacts

**Submission**

* Student teams should submit all developed deliverables during senior capstone I & II courses. Assign file names and file structures described below. Compress all files and directories to a single file, and upload it to cloud storage. Email a link to the compressed file to the course director and your project advisor.
* For the final report submission, create two folders named, “Document” and “Source code”.
* Copy produced reports and documents to the “Document” folder.
* Name each document file based on the following name convention:

“Document type – Team #id”. For example: “Final Vision document – Team #1”.

* Store source code, libraries, and a project file to reconstruct an executable to the “Source code” folder.

**Evaluation**

The emphasis for this evaluation will be on demonstrating that all system functionality has been implemented and operates in the user’s environment. This demonstration will take place in the context of a final project presentation.

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| **RUP Application development Team** | **Research-focused Team** |
| 80 The software product (Source codes)  20 Testing artifacts  5 Project schedule  5 User manual  10 Artifacts from the previous phases | 60 The software product (Source codes)  10 Testing artifacts  5 Project schedule  35 Final report  10 Artifacts from the previous phases |
| **Scrum Application development Team** |  |
| 80 Product Release  5 Updated Product Backlog  15 Completed Sprint artifacts |  |