COMS/SE 319: Software Construction and User Interface Spring 2018

LAB Activity 9 – Planning Your 319 Team Project

All of you have got your final team and today will be the first day of your 319 Project. All of you have joined your final group in Canvas and submitted the project proposal. You need to join a GitLab group and a Trello board to do your projects in a well-organized way and particularly following Extreme Programming (XP) process and TDD practice. Today's task will be as below:

Task 1:

Find your new group members and discuss with each other about your project in details inside the assigned room. Make sure you have a **Team Leader** from your group after the discussion.

Task 2:

I.   Collaborate with your Team Leader and help to create a "**Group Info.xls**" file and fill the details about your team as below. Make sure all of the members' ISU email id are there in a .xls file.

A	B	C	D
Final Group No	**Project Title**	**Team Members Name**	**ISU Email ID**

II.   After that, all of you should discuss the possible Project Title. Rename your with your project title at the end of Group number. e.g., If your group is 1, then your Canvas Group name should like "**Group 1-Your Project Title**". Your Instructor, TA will communicate with all of you through this. Then Team Leader has to go to the group's Homepage and upload your "Group Info.xls" and "Project Proposal pdf " **files** in the **File** section as below:
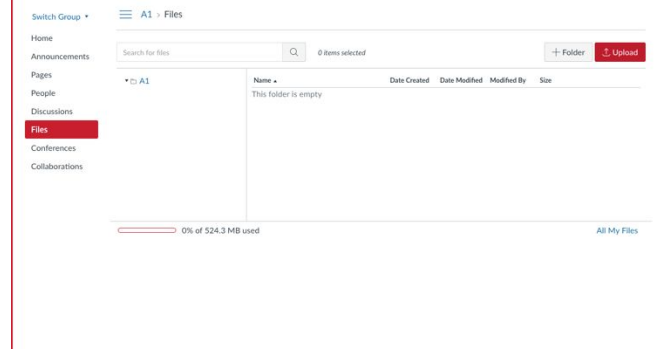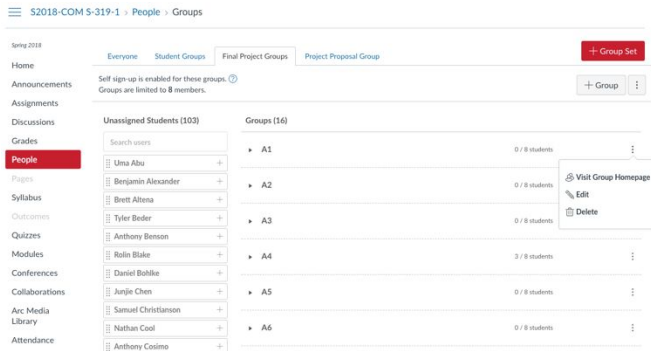
Task 3 - Joining GitLAB Group:

I. Now, your Team Leader will inform the TA (you can find in your assigned room) that your Group Info file is ready. Then your TA will add the team leader to your specific GitLAB group where Git activities will be performed for your project. **All of you need to sign in with your ISU email ID in GitLAB here (https://git.linux.iastate.edu/) at least once if you've never used GitLAB before. After that Team Leader will add the others using your ISU email ID.** Make sure all of you get the "**Maintainer Access**" to your specific GitLAB group. This will be your Group's GitLAB group. The Team Leader should follow the procedure as below:

    After Accepting invitation in the iastate email from your TA,

    Go to Setting->Members->Invite Others->Choose "**Maintainer Access**" ->Add to project
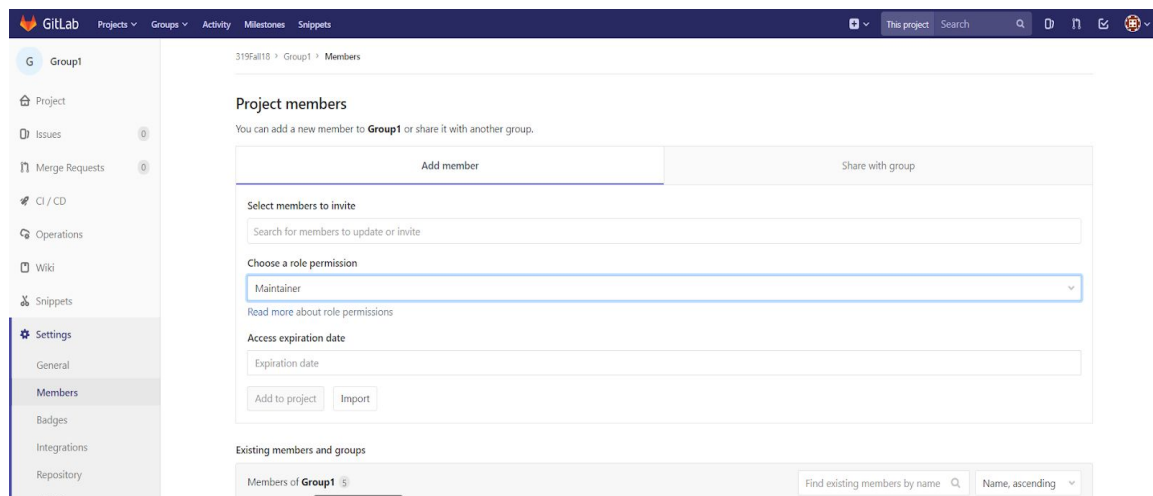
N.B.: You need to use the AnyConnect VPN Client for GitLab Access outside Campus (https://www.it.iastate.edu/howtos/vpn)

Task 4-Joining Trello Board:

I.   In the meantime, your Team Leader will be invited (in same **ISU email ID**) by your TA for joining your Group's specific "Trello Board" which will be used to track your group's XP practices. The team leader will join the Trello board and add other members with same **ISU email id**s as well in that particular board like below:
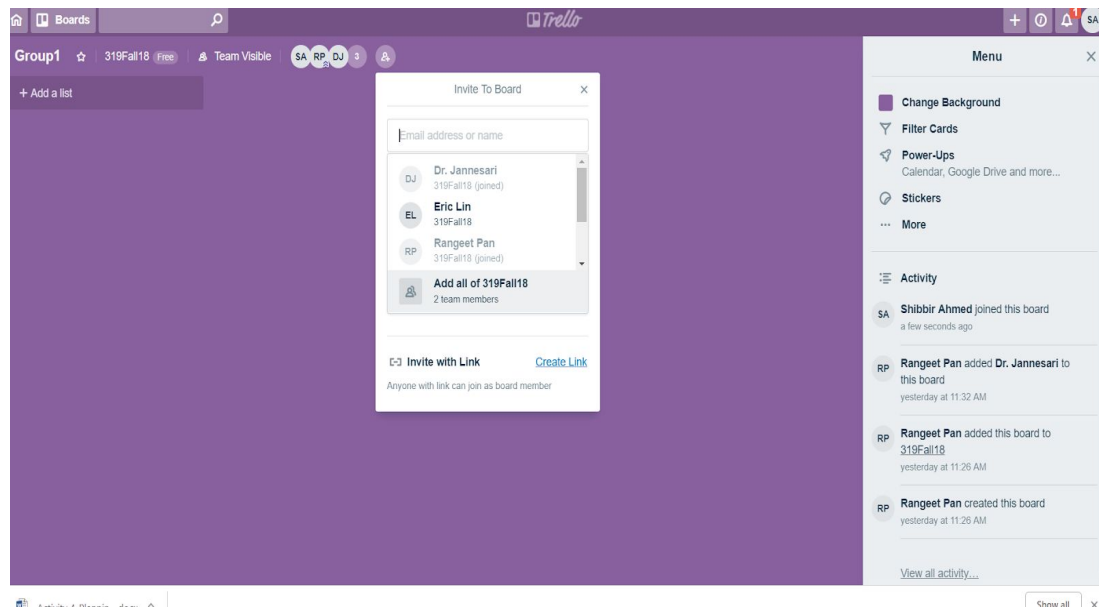
II.   The team leader should ensure all of your team members have accepted Trello and GitLab invitation from the ISU email IDs as your project activities especially XP Practice e.g., TDD, Pair Programming etc. are going to be monitored from your Group's Trello Board and GitLab group.

Check more about how to use Trello effectively in the Tutorial Slide inside your Canvas HomePage->"Trello for Agile Process as XP Tool.pdf" and GitLab Tutorial inside the Lab Activities Modules Canvas Home Page.

Task 5: Start Your Project

Now you have a final Group Homepage in Canvas, GitLab group and Trello Board dedicated for your group and you should start your project today right now in the LAB with below tasks:

I.   Now all of you know about all the features of your projects. Discuss with your teammates and create story cards as discussed in the class. Today one member of your team will be the "**Customer**" and you can use the primary initial features of your project. You can also see below references:
https://www.mountaingoatsoftware.com/agile/user-stories
https://www.mountaingoatsoftware.com/blog/advantages-of-the-as-a-user-i-want-user-story-template
https://medium.com/planning-with-cards/writing-user-stories-5999dc15602

http://www.agilemodeling.com/artifacts/userStory.htm

II.   Discuss the "**Effort Estimation**" and choose **at least 4 stories** that can be implemented in **1** "**Iteration**" (1 week). Again, for each story, break down the "**tasks**" required to implement it and who among of your team will be assigned do that task.

   Ref: https://www.mountaingoatsoftware.com/blog/what-are-story-points
       https://www.atlassian.com/agile/project-management/estimation
       http://www.agilebuddha.com/agile/agile-estimation-8-steps-to-successful-story-point-estimation/

III.   Now, the team leader will **Create a List, Rename it as "Story Cards"** in your project's Trello Board. You all need to write those 4 selected stories by adding a **Card** in that list and name it as "**Story 1: …*you will write the stories here….*"** and then again another one. like below:
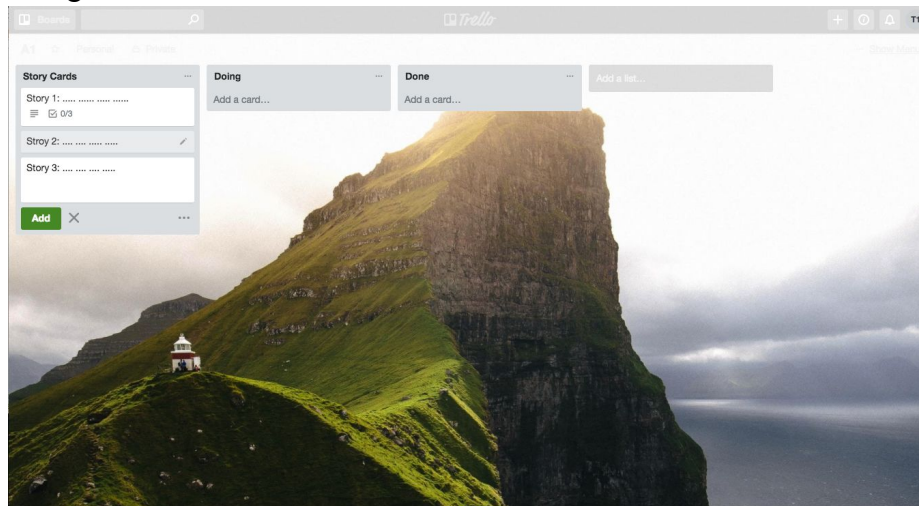

IV.   After writing a story, click 1 of them and write its effort Estimation along with detail description of that story inside the **Description** and write down the discussed Tasks for implementing that story in the **Checklist.** Then **Add the assigned Members** (**make sure everyone is added in at least 1 or 2 Story Cards based on Effort Estimation**) in that specific story card.
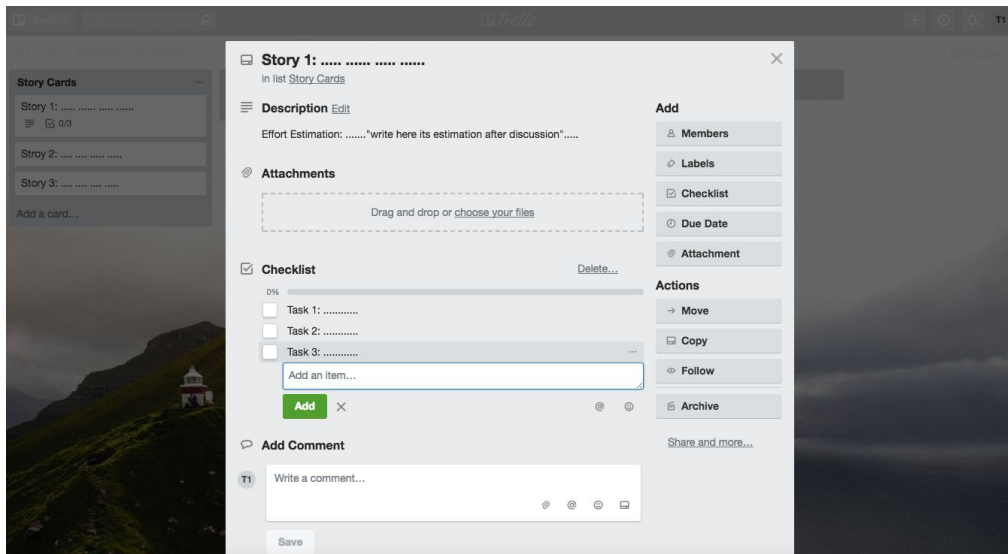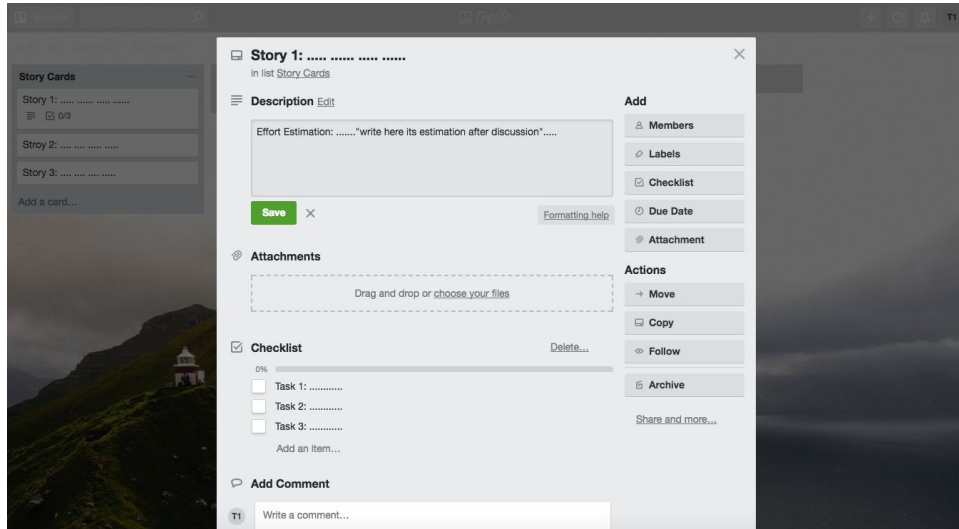
V. Once your team complete writing all 4 stories, ask your TA for discussion. Your TA will set the priority of Story Cards, and 1 or 2 Story Cards based on the Effort Estimation, Tasks, Assigned Members will be chosen. Finally, label them and set a due date for those Story Cards. Pay attention that iterations are weekly and you need to do the planning accordingly, i.e. choose only those stories that your team could implement and finish them in this iteration (based on your estimated effort). The first release will be **after two iterations (two weeks)** and you need to have successfully finished some story cards.

VI.   After checking the Green Label and Due Date, all of you should start doing the implementation of the Story Card following XP practices i.e., TDD, Pair Programming, Continuous Integration, etc. and get the software prepared for the acceptance tests which will be conducted by the customer (responsible TA) next week before starting the 2. iteration (on next Friday). **You are required to show the progress of your project every week and submit all your XP artifacts (Story Cards, tests, source code, design documents, iteration plan, ...)**. Deadline is before the start of next iteration in the following week. In case your customer (responsible TA) needs special input data for the acceptance tests (acceptance tests could be provided by your team or the customer), you need to prepare it. Pay attention that by the end of each iteration only those successfully implemented Story Cards will be tested by the customer. Incomplete story cards will be planned for the next iteration, merged into new Story Cards or discarded.
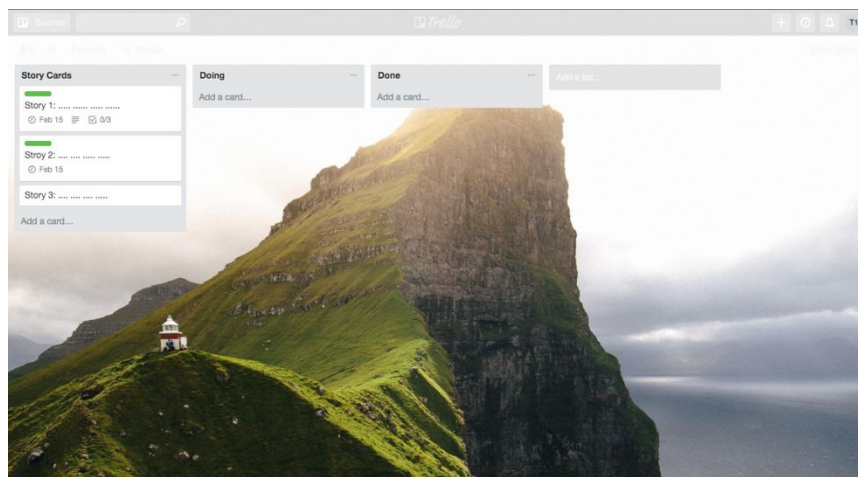
Project Timeline:

Day	Project Activity
10/26/2018	**LAB Activity 9 – Planning Your 319 Team Project**
11/02/2018	**LAB Activity 10 – Acceptance Testing for 1st Iteration**
11/09/2018	**LAB Activity 11 – Acceptance Testing for 1st Release & 1st Demo**
11/16/2018	**LAB Activity 12 – Acceptance Testing for 2nd Release & 2nd Demo**
11/30/2018	**LAB Activity 13– Final Release & Final Demo**

Project Evaluation Criteria:

The following criteria will be considered mainly for the Group Project Assessment:

1. Quality of Total Selected Story Cards (each week);

2. Successful Implementation of Story Cards Weekly (each week);

3. Individual Git Activity (Weekly push, number of commits, etc.);

4. Individual Trello Activity (Design Documentation upload, Weekly update, etc);

5. Weekly Manual/Automated Testing/ GUI based Implementation;

6. Assessment of 1st, 2nd Release Reports;

7. Evaluation of Final Report

8. Evaluation of FInal Demo

9. Successful Major Story Cards Quality;

10. Overall System Implementation;

11. Teamwork, Balanced Task Distribution among Teammates

12. Novelty/Originality of the project, Uniqueness/Creativity of the project;

13. Complexity of the project/Amount of Work done/Group Size/Programming proficiency level of the team members;