



Team Project Description

Your Team

You have been organized into a team with other students. The purpose of this team is to do three things:

- » Demonstrate your individual ability to contribute, communicate, and resolve conflicts with other students.
- » Facilitate the requirement to develop a larger project using one or more of the modules in this course.
- » Provide an opportunity to share your own ideas, experiences, and conclusions with other students.

Project Requirements

Your team will propose a software project to complete over the course at the same time you are working on your individual projects each Sprint. The project should have the following characteristics:

- » Create educational software for an elementary or secondary student (e.g. pre college grades, K-12).
- » Create one of the following:
 - Android Mobile App using either Java or Kotlin
 - Web App using Django and Python
 - Game using Python with either the Arcade or PyGame library
- » The project should store relevant data in either a SQL Relational Database, Cloud Database, or within a file.

- » The project should be large enough to provide a challenge over the remaining weeks of the course. However, the project should not be so large that it cannot be accomplished.
- » The project must be configured in a public GitHub repository with a well-documented README.md file. Use the following [README.md](#) template.

Schedule

You will use the same Sprint schedule as the individual modules to develop your team project. During the first Sprint, you will develop your project plan. Each Sprint you will communicate with your team to plan the tasks that each team member will complete during that Sprint. Your team will use Trello (refer to the Team Project Plan assignments instructions) to maintain the status of your team project tasks.

Planning your individual project first will be important so that you are aware of how much time you approximately have to devote to the team project in each Sprint. Ideally team project work should account for 25% of your Sprint time and individual project work for 75% of your Sprint time. This will vary in each Sprint and with each person to some degree.

Roles

When you develop your project plan during the first Sprint, you will be asked to identify team member roles. As a team you will need to assign the following roles (for smaller teams you will need to have some team members cover multiple roles):

- » Team Leader - Responsible for organizing and conducting team meetings and for submitting all team submittals to I-Learn. Responsible for ensuring all team members (including themselves) have an equal burden of coding work each Sprint.
- » Scheduler - Responsible for maintaining the schedule of tasks and assignments in the team Trello board.

- » Graphic Designer - Responsible for all the graphics in the software.
- » Quality Control - Responsible for regular testing and code review throughout the project.
- » Configuration Manager - Responsible for GitHub and the creation of documentation throughout the software development process.
- » Morale Officer - Responsible to actively encourage team members to both build a professional relationship with each other and to help team members remain optimistic and engaged in technical learning. The ability to tell the occasional funny joke would be good too!

Note that every team member has the responsibility to write code. That's the fun part!

Expectations

You may feel frustrated that your grade in this course is dependent on other people. However, you must realize that your success in a career, including your ability to provide for your families and build Zion in your communities, will rely directly upon the performance of you and others. While the penalties in college are restricted to grades, the penalties in the workforce will include the loss of trust and employment.

01. The team needs to regularly communicate via chat in Microsoft Teams (every 1-2 days during the week) and keep the Trello schedule board constantly updated. If you are diligent with your communication, then it will reduce your need to have in-person or video conference calls. You should organize an in-person or video call meeting if you are having a difficult problem that you need to solve in person together. You should also organize an in-person or video call meeting during the week if you are not getting consistent communication during the week. Failure to communicate consistently or attend team meetings regularly will reduce the ability of the team to succeed.
02. This is a programming class. Each team member must commit to developing an equal amount of code on the project. It is not acceptable to have a team

member focus on non-software activities only. Failure to do your equal share of coding will reduce the ability of the team to succeed.

03. You must dedicate the required time each week to complete all the required activities which you have committed to in your life. It is important that you balance your schedule so none of these activities is sacrificed. Failure to dedicate time for your team project will reduce the ability for the team to succeed. These commitments includes the following:

- » Assignments given to you in your team (about 2-4 hours a week)
- » Completion of individual modules in the course (about 6-8 hours a week)
- » Completion of other courses you are taking this semester
- » Family commitments
- » Work commitments
- » Church commitments

04. You must recognize if you are getting overwhelmed with work in your life. It is important to speak to your spouse, a family member, a friend, a team member, your teacher, a counselor, or a church leader if you find yourself having difficulty. Failure to talk to others when you are struggling may result in difficulty keeping other commitments, including personal commitments. Your emotional health is just as important as your spiritual and physical health. You must be proactive and ask for help.

05. A successful team is built upon the principles of the gospel of Jesus Christ. You are expected to individually do your part to ensure that the Holy Ghost is included in all your team's work. Consistent team and individual prayer is essential to invite the Spirit into your work. Consider the following scriptures frequently as you work together:

- » How to work as a team: [4 Nephi 1:3](#), [3 Nephi 12:44-45](#), [Moroni 6:4](#), [Alma 31:5](#), [Alma 32:37](#), [Alma 1:26](#), [Alma 26:11-12](#), [D&C 1:19-20](#), [D&C 88:121-122](#)

- » How to invite the Lord as a partner: [Mosiah 29:20](#), [Alma 37:36-37](#), [1 Nephi 7:21](#), [1 Nephi 10:17](#), [Alma 17:2-3](#), [3 Nephi 20:1](#)
- » When there seems to be no solution: [D&C 123:17](#), [Mosiah 4:9](#), [1 Nephi 1:20](#), [1 Nephi 8:8](#), [3 Nephi 11:3-5](#), [Alma 37:40](#), [1 Nephi 15:8](#), [1 Nephi 18:3](#)
- » What to do when we get discouraged: [Jacob 6:4](#), [Alma 4:15](#), [Alma 37:6](#), [Ether 12:27](#), [2 Nephi 4:35](#), [Mosiah 24:15](#), [Mosiah 23:21-22](#), [D&C 103:20](#)

Rubric

Your team project will be given a team grade according to the following rubric using a 100 point scale:

Criteria	Points
The project was satisfactorily attempted and is published in a public GitHub repository.	60
All requirements from the Project Plan have been implemented successfully	20
The code is fully documented with comments.	10
The README.md file has been created, placed at the top level of the repository, and well documents the software created.	10