Welcome to Mighty Oak Acorn Workbook

Overview

As part of CSE 170 Technical Teamwork, you will work in teams of 3-4 on four different Acorn projects. This workbook is to assist you in forming those projects.

Purpose

The purpose of working on projects is to help you better understand the complexity and practicality of the elements you learned in class. You and your team create the projects through careful preparation, guidance by the Spirit, and teamwork using inspiration, collaboration, and innovation.
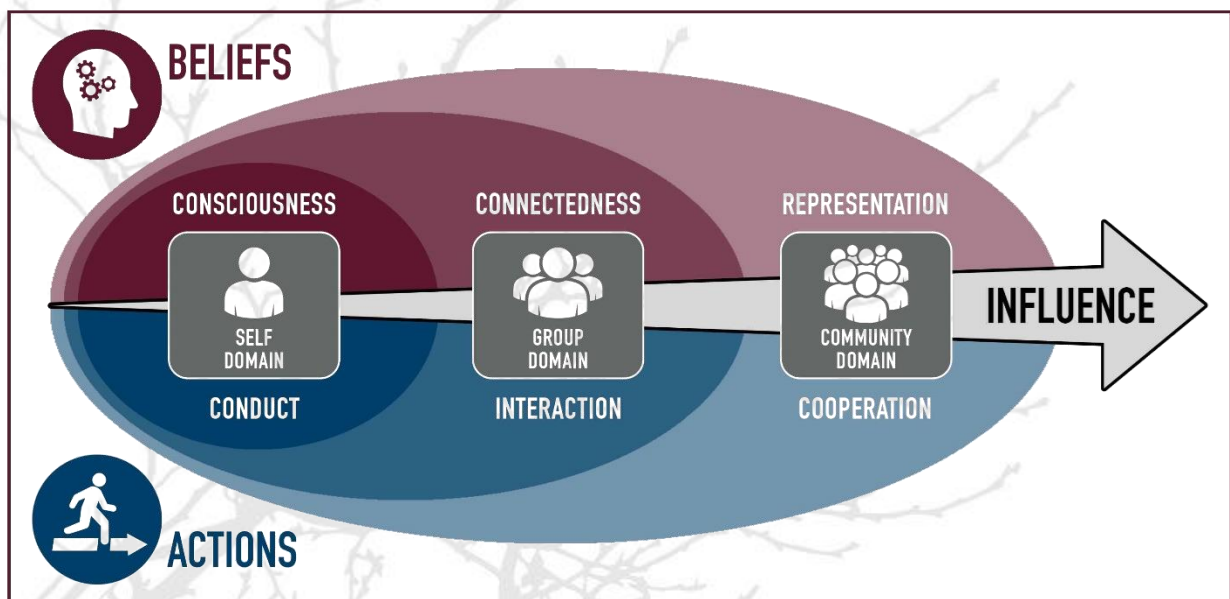
Background

Please read and watch the following information

- https://www.byui.edu/president/past-presidents/jacob-spori
- https://www.byui.edu/devotionals/justin-hodges

Requirements

Each project will focus on the Influence model and the Institutional Learning Outcomes.

Each project will focus on the Self, the Group, or the Community. Tying in the Belief or Action attributes associated in the Model of Consciousness: Conduct, Connectedness, Interaction, Representation, and Cooperation.

The university has four Institutional Learning Outcomes.

Each of your Acorn Projects will be assigned one of these learning outcomes.

- A Disciple of Jesus Christ
    - We believe in Jesus Christ as the Son of God and strive to follow Him.
- Sound Thinkers
    - We frame and solve problems using creative and critical thinking.
- Effective Communicators
    - We develop and express ideas that are purposeful, organized, and clear
- Skilled Collaborators
    - We work effectively with others to accomplish a shared vision.

NOTE: All I.L.O.s need a project.

Four Project Breakdown:
A project will consist of the following parts

- List the values associated with the project & a statement of the project vision
- Describe each of your roles
- A statement of your vision of success
- Each project must be a minimum of 10-20 hours.
- The project will have a Specific, Measurable, Achievable, Realistic, Timely Goal.
- Definition of the Goal: Who, What, Where, When How & Why
- List of Milestone, Achievements, Checkpoints, and Deliverables.

What should you do for your project? That is up to you and your team. You and your team will have to have some brainstorming ideas. Research some ideas, have backup ideas, and work together to synergize to come up with an innovative project.

Types of Projects

Acorn projects are small; they are smaller than class projects and bigger than individual and team assignments. You work on the Acorn Projects as a team.

Examples of Acorn project:

> Rules: You may use one of these examples as is. You may modify another. The other two you must come up with as a team.

- Attend a Career Services event as a team and work on a deliverable
- Participate in "Get Involved": Recreation, Ushering, Get Connected, I-Serve, Peer Mentoring, Rep Council, Tutoring
- Participate in a service project, service information, training that will help other students at BYU-Idaho.
- Create a program together, use a collaborative tool and resource repository.
- Join a Department Society and work together to contribute to a project
- Attend a Society Event such as a Hack-A-Thon, participate as a team
- Participate in a Sport, Sporting Event, or Team activity
- Attend a Leadership conference/activity produced by Student Services
- Participate in an Escape Room, Rope Course, or similar activity
- Discover 4+ campus building activities: for example Geology, Animal, Garden tour, Planetarium
- Plan three group date, with at least 3 activities
- Play 5 different players vs the board, 2-3 times, or an RPG game

Participation

Each project should be a significant effort. It will require some brainstorming, planning, execution, and reflections.

Each project should for the team be about 10-20 hours cumulative, with multiple sessions.   If there are four in a group, this breaks down to 2-4 hours each. I suspect that you will be around 3-5 hours each.

You work together as a team and do not split up the projects individually among yourselves.

Brainstorming

The following are tools and concepts you should know about brainstorming and managing your team's project and members. We will be covering each of these throughout the semester in detail and are here for reference and reminders.

- Ownership
    - o Ownership is one of the hardest things to learn. Ownership is taking the goal of the team and making it yours. It goes along with the scripture, "Be One." You put your whole might, mind, heart, and soul into it.
- Listening
    - o Listening is a key element in brainstorming. We have two ears and one mouth. For some reason, our ear does not hear when our mouth is moving and making sounds. Lord intended us to listen twice as much as we talk. If it became a problem, use the tool "the Talking stick," which the person holding the stick gets to talk about, then pass it along.
    - o "Seek first to understand, then to be understood" – Steven R. Covey
- Brainstorming
    - o This process is where you through ideas on the wall and vote on them. It is best to come prepared with 4-5 ideas, accept other ideas, and be prepared to have your ideas merge with others to be better ideas.
    - o A couple of questions to ask to help with the process
        - ▪ If you had unlimited finances, what would you do?
        - ▪ If you had magic, what would you do?
        - ▪ If you had unlimited time, what would you do?
- Problem Solving
    - o We are problem solvers. For thousands of years, your ancestors solved problems. You can solve problems. The problem sometimes is making a choice and committing to it.
    - o Steps: Describe the problem, gather information, determine important factors, visualize the solution, create action steps.
- Decision making
    - o Do not get stuck in the analysis paralysis loop, which is thinking about a solution and not taking any action. Pick a solution and go with it. A boat never sails if it does not get in the water.
    - o Sort, Rank, and Vote on the solution. And then do it. The change will happen along the way that will make it better.

- Conflict Management
  - Everyone has different experiences and opinions based on those experiences. Everyone has different backgrounds and values-based on those backgrounds. That is ok and is necessary. Without conflict, a boat does not sail, and planes don't fly. We do not strengthen our muscles, bones, and tendons. Good Conflict Management creates a space where ideas can share, discuss, analyze, poked at, torn apart, and put back together better, without insults, put-downs, or negative feels.
  - "You can empower yourself, but can only encourage others."
  - Tools: Negotiate with rules and limits, be cooperative, be direct, be aware of yourself and others, establish trust, be open.
- Communication
  - Oh, communication. Say what you mean. Say what you are going to say, say it, and say what you said. Keeping your thoughts back does not work with brainstorming. Letting everyone participate is also just as important. Being present is also needful.
    - Form of Communication: Nonverbal, Oral, and Written
    - Blueprint of Communication: Message, Sender, and Receiver
    - Assure good communication: Common ground, Sincerity, Authority (to act, not be acted upon), and clarity.
    - Barriers of Communication: lack of receptiveness and a good environment.
- Coaching and Mentoring
  - Ask for help is necessary. Ask to have some to report to also necessary. You don't think you need a coach; you can do it on your own. Think again. Every professional has a coach; that is how they got to be a professional—sports, Business, C.E.O., etc.
  -
- Change
  - Things are going to change; plan on it. The first plan never works out. The original idea will not be the final product. Being adaptable is necessary. Ask a carpenter if every cut is exact or is just close enough. Ask an artist if all lines are straight. An Engineer is there no tolerances. Build in the wiggle room.
    - When change is needed, leading change can make it happen
    - How to lead change: recognize the change, empower others to make the change, base change on value, mission, and vision, establish urgency, move ahead with the unknowns (manage and mitigate the risks, don't get stuck in analysis paralysis),

- Feedback
    - You are going to receive feedback. Prepare for it. That is how you learn. Make sure you go in without your eye wide shut, seeing but not seeing. Other perspectives allow you to see what you forgot you saw. Remember, the feedback is not you. It is reality. It is you being looked at through someone else's eyes and mind, repeated back to you through your eyes and mind. It is like taking a photograph, making a drawing of it, and then you are describing what you saw from the drawing. Receiving feedback is like receiving the word at the end of the play, the game Telestrations.
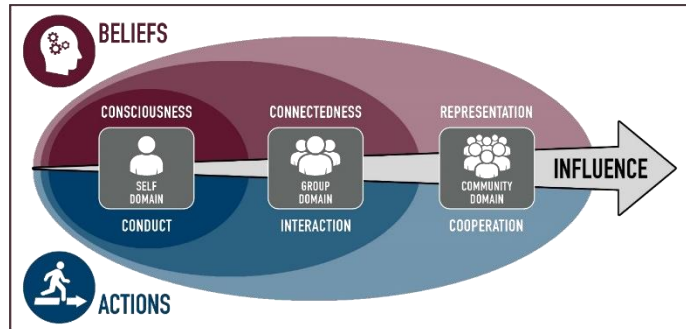   - "Consider feedback to be a gift. It truly is."

Acorn Project Worksheet Explanation

Record the summary of your brainstorming activities.

Project Influence

Pick one of the following:

- Self
    - ☐Belief: Consciousness
    - ☐Actions: Conduct
- Group
    - ☐Belief: Connectedness
    - ☐Action: Interaction
- Community
    - ☐Belief: Representation
    - ☐Action: Cooperation

Explain how this project will Influence you, your team/group, or the community.

Project Mission Focus:

Identify 1 of the following for this Project Goal. Must have one project goal for each I.L.O.

- ☐Disciple of Jesus Christ
- ☐Sound Thinkers
- ☐Effective Communicators
- ☐Skilled Collaborators

Personal Values

Values are our core beliefs or desires that guide or motivate our attitudes and actions. List your values and the forms that they take; principles, standards, personal qualities, character traits, or ethics codes.

Vision Statement

A vision is a picture of future success. Our vision is when we think far enough to realize that there will be challenges for which we can prepare.

S.M.A.R.T. Goals

"A Goal Without a Deadline is Only a Dream!"

Define your Acorn project as a "SMART" (**S**pecific, **M**easurable, **A**ttainable, **R**elevant, and **T**imely) goal.

- **Specific** - Describe this Acorn Project Goal in enough detail so that you, your teammates, and the instructor know specifically what you are going to do, how it is important, or how it will impact you. Is it challenging?
- **Measurable** - Describe how this Acorn Project Goal is Measurable. How will you know when the goal is completed? What is your exit strategy? What are the milestones?
- **Attainable** - Describe how this Acorn Project Goal is Attainable. Can it be accomplished? You have 10-12 weeks to complete the project with four people.
- **Relevant** – Describe how this Acorn Project Goal is Relevant. How does it relate to BYU-Idaho I.L.O.s? How will it help grow your Acorn into a might oak?
- **Timely** - Describe how this Acorn Project Goal is Timely. Can it be accomplished in a reasonable amount of time? Ten cumulative hrs. minimum per project

Re-write the SMART goal as a single sentence.

Milestones
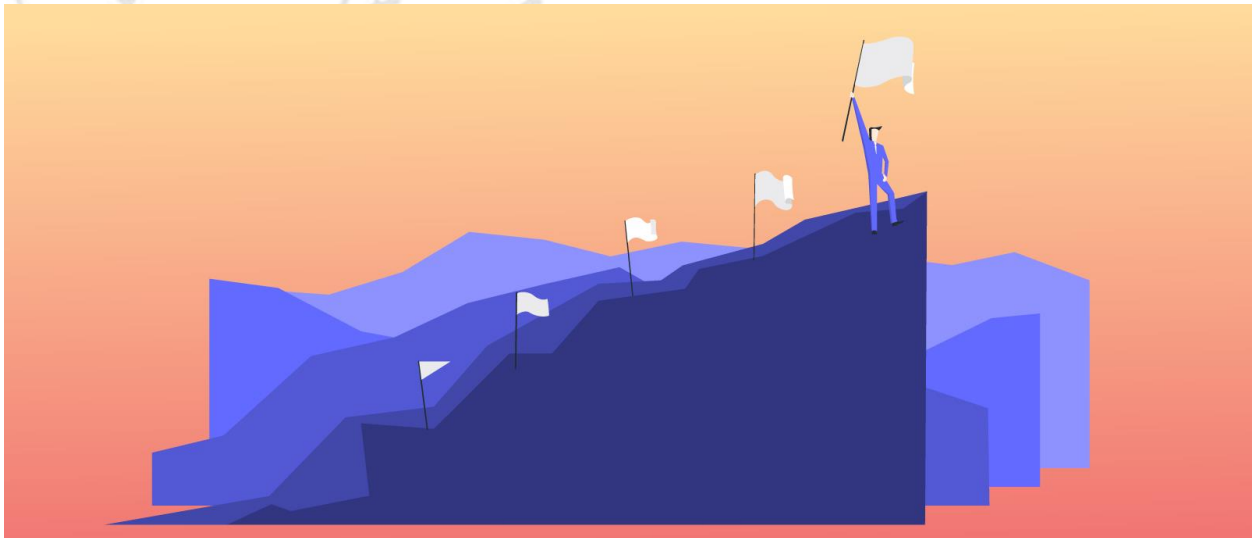
It takes more than one step to complete goals. List up to 10-12 milestones, achievements, checkpoints, or deliverables for your goal. Following the network of high-level objectives, break down each objective into separate activities necessary to accomplish it. Order and prioritize the activities by the longest and plan.

Approval of Project

You will submit your projects for review & approval to your instructor. Expect a week for feedback. You can continue as if it was approved; meanwhile, your instructor will give you additional tasks and ideas to improve the projects. Submit a final revision with changes for approval.

Bi-Weekly Status of Project

As mentioned in the brainstorming, you will have changes, conflicts, decision making. Change is normal. Each week you need to meet with your team to discuss the progress of your Acorn Projects. You can complete them in sequence or parallel.

You will be required to provide the status of your Acorn projects every other week. You will need to indicate the **percentage done**.

Stages of Team Development

As you move with your Acorn project, you and your team will hit some challenges and accomplish some breakthroughs. Here is a guide to let you know what you will face as your team pulls together. It is expected that each goal has multiple sessions/milestones, to show these phases.
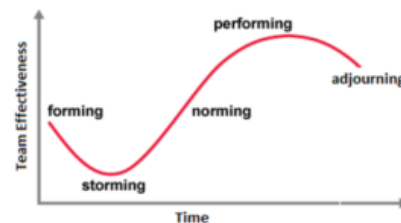
The first stage in a team's development is **Forming** ("Pickup Sticks," "Polite").

Most team members are eager to be on the team. However, they often come with high, unrealistic expectations. These expectations come with some anxiety about how they will fit in, how much they can trust others, and how much time to set aside. Team members are also unclear about norms, roles, goals, and timelines. In this stage, there is a high dependence on the leading figure for purpose and direction. Behavior is usually tentative and polite. The major issues are personal well-being, acceptance, and trust.

The second stage in a team's development is **Storming** ("At Odds," "Testing").

As the team gets some experience working together under their belt, there is a dip in morale as team members experience discrepancies between their initial expectations and reality. The difficulties in accomplishing the task and working together lead to confusion and frustration, and growing dissatisfaction. Negative reactions to each other develop, and subgroups form, which polarize the team. The breakdown of communication and the inability to problem-solve result in lowered trust. The primary issues in this stage concern power. Control and conflict.

The third stage in a team's development is **Norming** ("Coming Around," "Valuing").

As the issues encountered in the second stage are addressed and resolved, morale begins to rise. Task accomplishment and technical skills increase, contributing to a positive, even euphoric feeling—clarity and commitment increase on purpose, values, norms, roles, and goals. Trust and cohesion grow as communication becomes more open and task-oriented. There is a willingness to share responsibility and control. Team members value the differences among themselves. The team starts thinking in terms of "we" rather than "1.1! Because the newly developed feelings of trust and cohesion are fragile, team members avoid conflict for fear of losing the positive climate. This reluctance to deal with conflict can slow progress and lead to less effective decisions. Issues at this stage concern the sharing of control and avoidance of conflict.

The fourth stage in a team's development is **Performing** ("As One," "Trusting").

At this stage, both productivity and morale are high, and they reinforce one another. There is a sense of pride and excitement in being part of a high-performing team. The primary focus is on performance. The purpose of roles and goals are clear. Standards are high, and there is a commitment to meeting standards and continuous improvement. Team members are confident in their ability to perform and overcome obstacles. They are proud of their work and enjoy working together. Communication is open, and leadership is shared. Mutual respect and trust are the norms. Issues include continued refinements and growth.
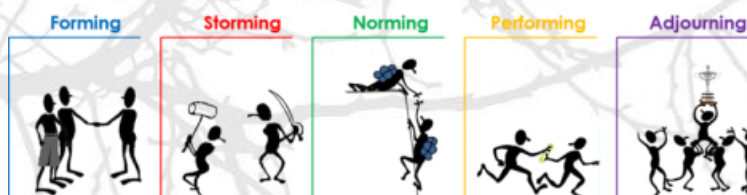
Pushing Through

As mentioned in the brainstorming, you will have changes, conflicts, decision-making. Each week you need to meet with your team to discuss the progress of your Acorn Projects. You can complete them in sequence or parallel.

You will be required to provide the status of your Acorn projects every other week. You will need to indicate the **percentage done**.

The finish line

No runner stops exactly at the finish line; No athlete walks straight to the car and goes home; No engineer throws away all the equipment after an experiment. After camping, what do you keep and what do you throw away. There is clean up, reflection, lessons learned, and preparing to do it again.

You will need to complete the following for each Acorn:

1. Presentation
   a. Your team will be required to present a 3-5 minute briefing of your Acorn Project to the class.
2. Lessons Learned
   a. You need to reflect on the vision and goal of the project. Think if you were to do each of the projects again, how would you do better. What advice would you give someone?
   b. You need to have at least two lessons learned for each of the 4 Acorn Projects.
   c. Also, additional lesson learned on your team dynamics.
3. S.T.A.R
   a. Write up a summary of your experience in the following format
      i. S. Situation
      ii. T. Task
      iii. A. Achievement
      iv. R. Results
4. Participation
   a. Each of you will provide a report on how you participated and
   b. Each of you will report on how each member of the team participated.
   c. As a team, you will determine how many hours you spend on each project.
5. Stop, Start, and Continue
   a. As a team and as an individual, you need to reflect on three things:
      ▪ Stop: List an item that your team and yourself that you need to stop doing that hindered the team and project.
      ▪ Start: List an item that would improve and innovate the project.
      ▪ Continue: List items that went well and is necessary for the success of the project
   o Complete Stop, Start, and Continue for each of your projects.

Presentation of Acorns Ceremony

On the Last of Class, we will have a ceremony where I will present you with four Acorns, one for each project that you completed.

Other Resources

- https://www.byui.edu/mighty-oaks

Acorn Project Worksheet

Project Mission Focus: Disciple of Jesus Christ

- **Team Name: Back Corner**
- **Team member's Names: Jackson, Franck, Spencer, Noah**
- **Project Title:** Weekly Devotionals
- **Project Influences:**

	Belief	**Actions**
Self	☐Consciousness	☐Conduct
Group	**X Connectedness**	**X Interaction**
Community	Representation	☐Cooperation
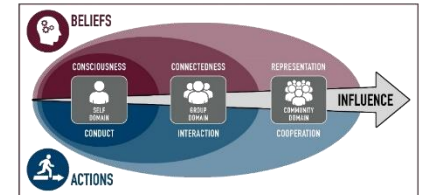
Explain:

This project will allow us to grow our individual testimonies as a group. We will do so by sharing our individual revelations and thoughts with one another, and actively listening and providing feedback. Not only will our testimonies be strengthened, but we will also grow closer together as a group.

- **Project Values:** Teaching each other, strengthen our testimonies.
- **Description:** Attending the weekly devotionals and meeting afterwards to talk and discuss for an hour the insights we gain and what we have learned.

- **Vision Statement:** We will take turns attending the weekly devotionals on campus and discuss what we each learned in an effort to strengthen one another's testimony's and become better disciples of Jesus Christ.

- **SMART Goal:**
  - o Specific: One person each week is going to attend one of the weekly devotionals, and then afterwards, we will get together, and they will teach us what they have learned, and we talk and discuss together.
  - o Measurable: it is measurable because each person will be accountable for going to devotional for their week.
  - o Attainable: This project is attainable because we each will each be accountable for attending a devotional and teaching and discussing what they have learned with each other.
  - o Relevant: This project relates to the ILO of Disciple of Jesus Christ because we will be learning something spiritual from devotional and teaching what we learned to other members of our group.
  - o Timely: Yes, this project is timely. One person will go to devotional which is about one hour, and then we will all come to discussion for about an hour, and which will add up to at least 10 cumulative hours.

Summary: One person will go to the weekly hourly devotionals, and then we will come together and discuss the devotional for an hour.

- **Audience (*Who, What, Where, When, Why, How*): Our group members, going to watch the devotional and discuss it, watch the devotional at the I-Center and then meet afterwards somewhere to discuss about the devotional, every Tuesday.**

- **Roles and Responsibilities:**

Role	Responsibilities
o **1: Week 8, 9**	**Attending a leading discussion for week 8, 9**
o **2: Week 10, 11**	**Attending a leading discussion for week 10, 11**
o **3: Week 12**	**Attending a leading discussion for week 12**
o **4: Week 13**	**Attending a leading discussion for week 13**
o	

- **Milestones**
  - o 1. Week 8, 9 meeting
  - o 2. Week 10,11 meeting
  - o 3. Week 12 meeting
  - o 4. Week 13 meeting
- **Instructor Improvements Suggestions**:
  - o _____
  - o _____
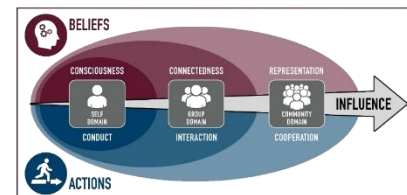   [ ] **Approved**   Date: _____

Acorn Project Worksheet

Project Mission Focus: Sound Thinkers

- **Team Name: Back Corner**
- **Team member's Names: Spencer, Noah, Jackson, Franck**
- **Project Title:** Website Application
- **Project Influences:**

	Belief	**Actions**
Self	☐Consciousness	☐Conduct
Group	**X Connectedness**	**X Interaction**
Community	☐Representation	☐Cooperation

Explain: Working on this project will require us to brainstorm as a group, make a game-plan, and divide the project into smaller, more manageable pieces.

- **Project Values:** Effective communication, problem-solving, brainstorming, dividing responsibilities
- **Description:** We will build a website application that will take information from the user, and in turn, provide the user with information regarding various ride-sharing services.

- **Vision Statement:** We will work together to build a web-app that will help others.

- **SMART Goal:**
  - Specific: Our web-app will be divided into various functions. This will allow us to better track our progress on the program.
  - Measurable: The completion of our project will be measured by whether or not it is able to run successfully
  - Attainable: We all have at least a rudimentary understanding of HTML, CSS, and JS.
  - Relevant: The project relates to the ILO because, in order to succeed, we will all need to work together and think critically about how the web application will run.
  - Timely: The project will be completed by the end of the semester

  Summary: We will be using our computer skills to make a simple website using HTML, CSS, and JS, that will be completed in 6-7 weeks that will run.

- **Audience (*Who, What, Where, When, Why, How*):**

Our group members will work together to create this program. It will also benefit those who wish to use it after we've created it. We will draft a design for the program, and divide it into manageable parts amongst ourselves, so we each have an opportunity to contribute.

- **Roles and Responsibilities:**

Role	Responsibilities
1: Signup and login	Creating login/ signup
2: Retrieve User Input	
3: Fetching information from relative website	
4: Making HTML and CSS	Creating the style and layout of the website

- **Milestones**
  - 1. Build a site plan for the website
  - 2. Start writing the HTML for the website
  - 3. Added CSS styling to the website
  - 4. Build the functioning part asking the user to enter in their data
- **Instructor Improvements Suggestions**:
  - _____
  - _____
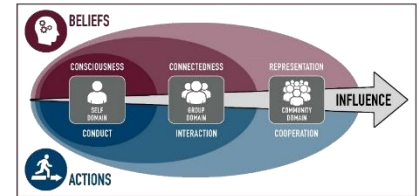   [ ] **Approved**   Date: _____

Acorn Project Worksheet

Project Mission Focus: Effective Communicator

- **Team Name: Back Corner**
- **Team member's Names: Spencer, Noah, Jackson, Franck**
- **Project Title:** Going to an Escape Room
- **Project Influences:**

	Belief	Actions
Self	☐Consciousness	☐Conduct
Group	**X Connectedness**	**X Interaction**
Community	☐Representation	☐Cooperation

    Explain: Interact with each other and join together to communicate and finish the escape room in under a certain amount of time using our communication skills that we have.

- **Project Values:** Communicate clearly, active listening, problem-solving
- **Description:** Participate in an escape room

- **Vision Statement:** Our vision is to complete the escape room in a given amount of time.

- **SMART Goal:**
  - Specific: Planning on working on communication as a team by completing an escape, working on our communication, and working together as a team while under pressure to complete the escape room.
  - Measurable: This goal is measurable because we will be researching escape rooms and figuring out a plan to communicate and work together and use team work to complete the escape room.
  - Attainable: This acorn project is attainable because it will take us a week to plan and complete the escape room as a team.
  - Relevant: This relates to the ILOs because we will have to use good communication to figure out how to complete and finish the escape room.
  - Timely: It can be accomplished in 10-12 hours after planning, practicing, and going out and completing the escape room.

  Summary: After planning out our trip to the escape room, we will use our communication skills to complete the escape room within a given amount of time.

- **Audience (*Who, what, Where, When, Why, How*): The group, participate in an escape room, at the escape room in Rexburg, within the next six why, to work on communication skills, getting together and going to the escape room.**

- **Roles and Responsibilities:**

	Role	Responsibilities
	Role	**Responsibilities**
o	**1: Researcher**	**Find escape rooms around and details about it**
o	**2: Driver**	**Drives everyone to the escape room**
o	**3: Communication Researcher**	**Research good communication skills and ways to function better as a team under pressure**

- **Milestones**
  - 1. Find escape
  - 2. Figure out a day and time to go
  - 3. Call and schedule a slot to go
  - 4. Figure out a plan help us complete the escape room better
  - 5. Go to the escape and complete it as fast as we can.
- **Instructor Improvements Suggestions**:
  - _____
  - _____
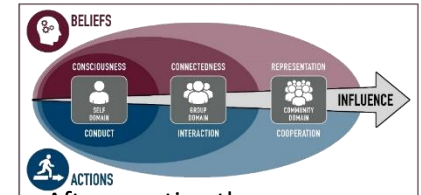
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Acorn Project Worksheet

Project Mission Focus: Skill Collaborators

- **Team Name: Back Corner**
- **Team member's Names: Spencer, Noah, Jackson, Franck**
- **Project Title:** Basic Python Calculator
- **Project Influences:**

	Belief	Actions
Self	☐Consciousness	☐Conduct
Group	**X**Connectedness	**X**Interaction
Community	☐Representation	☐Cooperation

Explain: As a team, we will brainstorm and create a plan for our program. After creating the plan, we will divide up the responsibilities, and complete them. After finishing our individual assignments, we will combine them all into a main function or program.

- **Project Values:** Efficient communication, division of responsibilities, provide and receive constructive criticism.
- **Description:** We will work together to create a basic calculator function written in python. We will divide the 4 main operations (addition, subtraction, multiplication, division) amongst the members of the group. Each group member will write a function that will take 3 arguments (2 numbers and an operator) and perform the calculations.

- **Vision Statement:** We will effectively divide responsibilities and perform our respective tasks to create functioning, and well-written program.

- **SMART Goal:**
  - **Specific:** The program will be divided into at least four functions, each with a specific purpose
  - **Measurable:** The progress made on our project will be measured by the completion of the individual functions.
  - **Attainable:** The goal of creating this program is attainable, as we all have experience with Python and basic programming.
  - **Relevant:** Our project is relevant to the ILO of becoming skilled collaborators, as our success will be wholly dependent on our ability to work with one another.
  - **Timely:** We will be able to complete the project by the end of the semester.

  Summary: We will work together to create a basic program in Python by dividing the project into smaller pieces and assigning those pieces to group members.

- **Audience (*Who, What, Where, When, Why, How*):**
  - Our group, Create a program together, Github repository and meeting on zoom/ in person, before the end of the semester, practice collaborating as a group, creating a Github repository and importing functions.

- **Roles and Responsibilities:**

Role	Responsibilities
1: Addition function	Create addition function
2: Subtraction function	Create subtraction function
3: Multiplication function	Create multiplication function
4: Division function	Create division function

- **Milestones**
  - 1. Addition function
  - 2. Subtraction function
  - 3. Multiplication function
  - 4. Division function
  - 5. Combine all functions into main function

- **Instructor Improvements Suggestions**:
  - _____
  - _____

    [ ] **Approved**   Date: _____