L·E·A·P
Leadership. Education. Achievement. Personal Growth.

LEAP Report – Competition Engagement (HS)
Competitive Event Leadership Experiences

Coding
Competitive Event

2148-006 2148-012/2148-901
Participant/Team ID#

The Student Leadership Challenge*		Leadership Experiences
Practices	**Behaviors**	
Model the Way	Follow through on promises and commitments	We modeled the way by sticking to a specific schedule. We promised to meet, study, and follow things through. We set an example to our teammates through dedication and hard work ethics. We made ground rules so encounters would run a lot quicker and more efficiently. We made sure to understand concepts for bettering ourselves and tested ourselves for feedback on our knowledge of the technological industry. We made sure to have the correct values and principles so we could have a positive influence on ourselves and our TSA group.
	Set a personal example through actions	
	Align others with principles and standards	
	Seek feedback about impact of actions	
	Make sure teammates support common values	
	Talk about values and principles	
Inspire a Shared Vision	Look ahead and communicate future ideas	The group inspired a shared vision by looking ahead to the future. We made sure that we were well prepared for what was to come. We thought about how we wanted to succeed overall so we could reach our capabilities and develop a bright future in our careers. We made sure that we got along with other teammates and made sure that we were on good terms in general. We wanted to get ahead in our career path, which we thoroughly discussed. We proved that putting your blood, sweat, and tears into something can make things interesting and fun. We inspired many to work hard and have fun in the process.
	Describe ideal capabilities	
	Talk about how future could be improved	
	Be upbeat and positive	
	Communicate purpose and meaning	
	Show others how their interests can be realized	
Challenge the Process	Challenge current skills and abilities	We made sure that the process was not too easy. We threw new things into the mix to make sure we knew as much as possible. We shared the paperwork so that one person did not have to work on the full thing. We asked questions so we could go over how our project worked and how much we would learn from it. Every day before we got into the room, we would ask ourselves, "What can we learn?" We made sure that we would study our project rather than waste time and do nothing for the whole meeting. We tried to find the best methods for the group throughout the time being because we wanted to make sure that we had the best results. Not only did it benefit us throughout the time in TSA, but it also helped us in school with our various techniques.
	Break projects into smaller do-able portions	
	Search for innovative ways to improve	
	Ask “What can we learn?”	
	Take initiative in experimenting	
	Help others try out new ideas	
Enable Others to Act	Foster cooperative relationships with others	We always made sure to be nice and cooperative with other teammates as they got ready for TSA. We were open to suggestions between each other so everyone had a fair share of ideas. We considered every idea rather than getting rid of the entire idea altogether. Everyone treated each other with the best of respect. We made sure to go off of each other and hear what each of us had to say about the project. We gave each other support for the decisions we made. Everyone had the freedom of doing what they wanted with their studying techniques. We would decide on whether we would want to meet for a specific day or not so we could get everything done quicker.
	Actively listen to diverse viewpoints	
	Treat others with respect	
	Support the decisions other people make	
	Give people freedom and choice	
	Provide leadership opportunities for others	
Encourage the Heart	Praise people	We made sure that everyone was in high spirits overall. We made sure to give praise to the others for their good work so that they were noticed. We made sure to encourage each other by doing our best and helped each other out if necessary. We appreciated the ideas that were taken into account throughout the entire process. We would raise morale by having time to ourselves and just have fun with something throughout. We recognized the ideas that our teachers and mentors gave us and thanked them for all that they have done. We made sure to recognize each others' feelings because, without each other, we would have not made it very far.
	Encourage others	
	Express appreciation for people’s contributions	
	Publicly recognize alignment with values	
	Celebrate accomplishments	
	Creatively recognize people’s contributions	

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LEAP Report – Competition Engagement (HS)
General Leadership Experiences

Coding

Competitive Event

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Participant/Team ID#

Leadership Categories	Leadership Experiences
Leadership Roles	From our previous work with leadership, our group members have helped with sections in Marching Band by providing others with vital information and techniques necessary to be successful during the season. Our other group members have participated in sports and youth group leadership activities.
Community Service/ Volunteer Experiences	Our group members worked during the Holiday Expo fund raiser to raise money for the band. We also tried to recruit members for TSA so we could expand our horizons with the people in our group. Other group members have helped in volunteer church activities.
Leadership Development	Our group has never missed a TSA meeting and we bonded with friends and other members. We always took ideas into consideration and never left anyone out of the conversation.
College Career Planning	Our group attended a college/career fair to expand our knowledge on what we wanted to do with our lives in the future. We looked into our majors of our desired colleges through meetings with other colleges. We also investigated different colleges that interested us.

The Student Leadership Challenge* Practices and Behaviors	
Model the Way	Follow through on promises and commitments
	Set a personal example through actions
	Align others with principles and standards
	Seek feedback about impact of actions
	Make sure teammates support common values
	Talk about values and principles
Inspire a Shared Vision	Look ahead and communicate future ideas
	Describe ideal capabilities
	Talk about how future could be improved
	Be upbeat and positive
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Challenge the Process	Challenge current skills and abilities
	Break projects into smaller do-able portions
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Enable Others to Act	Foster cooperative relationships with others
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Encourage the Heart	Praise people
	Encourage others
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Installation

Download links are at the bottom of the documentation if needed

The executable takes a while to load when being run the first time

1. Download Executable (should have a .exe extension)
2. Open Executable
3. If a windows defender pop-up occurs, click more info then click run anyway

Program can be run using python 3.7 or 3.6 but the user should have python installed and run the command “pip install eel” in the command prompt beforehand.

Then, open the main.py script and run it.

The easiest way to run the program is to simply run the windows executable(.exe).

Windows 64 bit and a web browser is all the is needed to run the executable.

System Requirements

- Windows 10 64 bit
- At least one web browser installed
- (Optional) Have chrome set to default web browser
- (Optional, not needed if running the executable) Have python and eel installed

All Script Commands For Console

Commands were designed to be as simple as possible to avoid unnecessary complications

See the usage section for more information about proper usage on the commands below

- Move – used to move the antenna to a desired position.
- Stow – used to move the antenna to the position 0, 0.
- Begin – used to start logging all commands and antenna information to a specified location.
- End – used to end the logging of all commands and antenna information.

- Collect – used to begin data collection and logging of dark matter values.
- Load – used to load a custom script and run in the console automatically.
- Save – used to save a position as a variable and call it later.

Basic Syntax and Output Information

- All commands should not be capitalized in any way.
- To run the command entered in the console input, simply press the enter key.
- When providing a file name for logging or script execution, please do not use any file with a space in the name.
- ANY file extension can be used when supplying or loading a document.
- All position output is formatted in x and y coordinated Ex. 2, 34.
- The first value represents azimuth.
- The second value represents elevation.

Angle Limitations

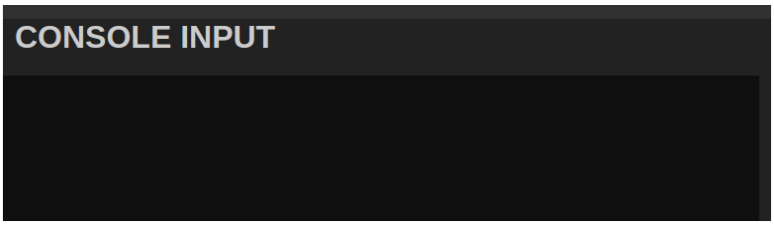
The antenna's azimuth must be between 0 and 135 degrees (including 0 and 135)

The antenna's elevation must be between 0 and 70 degrees (including 0 and 70)

User will be warned if attempting to move the antenna beyond these limitations

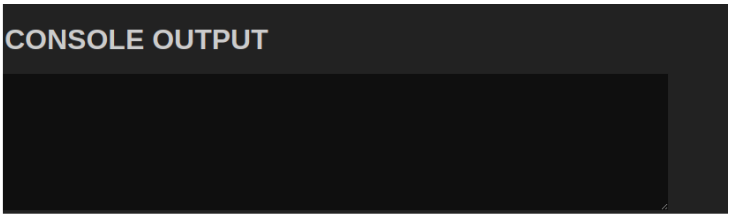
Basic GUI Item Location

Console Input – Used to enter commands into the interface



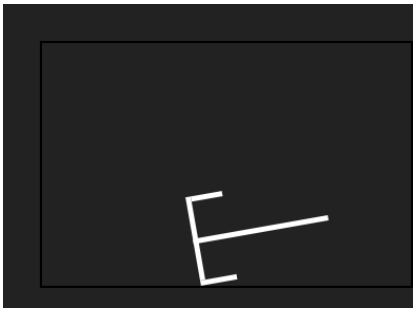
Console input image

Console Output – Location where interface information is output



console output image

Antenna Visualization (Vertical Only) - Location where the visual representation is located



Command Usage

Move command usage:

- Example: move 10 10
- Numbers can be decimals

Stow command usage:

- Example: stow
- Will move to 0 0
- Executes Command A0 OFF

Begin command usage:

- Example: begin log.log
- If no file location is specified, the log location will be at “defaultLog.log”

End command usage:

- Example: end
- Will end the logging of only interface data collection NOT data collection

Collect command usage:

- Example: collect data.log 13
- A specified time in seconds after the log location must be present
- Data collection will automatically end after the specified amount of time
- Any commands entered before the collection has ended will be run immediately after the data collection ends.
- If the time is over 240 seconds the program will move the antenna +1 degree of azimuth every 240 seconds. (This is done to continue collecting data on drifting objects)

Load command usage:

- Example: load script.txt
- Script execution will automatically begin after the command is entered
- See the Script Syntax section for details on proper syntax when writing scripts
- Any unreadable line will cause the script to stop before continuing

Save command usage:

- Example: save p1 5 5
- Typing in the name of the variable will automatically move the antenna to that saved position

Script Syntax

All lines of the script must not be separated by any character.

Example:

Incorrect script:

move 10 10;

stow;

Correct script:

move 10 10

stow

NO SPACE BETWEEN LINES

Script Examples and Source Code/Nonstandard libraries

Script examples can be downloaded from here

https://drive.google.com/open?id=19B_MnPyeCs_Vhd0hwOiqP36cNYIsxk2j

Source code can be downloaded from here

https://drive.google.com/drive/folders/1eYxs7iiWNiaPVzykCpJKGf5n9OmIPkG3?usp=sharing

Executable can be downloaded from here

https://drive.google.com/file/d/1slHRubMbnGk7p-bl3kZK_lktQdN5Tswy/view?usp=sharing

Nonstandard libraries can be downloaded from here

https://github.com/samuelhwilliams/Eel

Or here

https://drive.google.com/file/d/1wqeqUu67VpUHaCq1x8ZnRxYKj-PWx2NY/view?usp=sharing

Other Information

This program was written in python, but it also includes JavaScript in the main.html file inside the web directory.

To view the JavaScript code, open the main.html file in a text editor so that it doesn't open the file in the browser