# AgriCom Training Proposal

Team B: David Gladden, Christopher Katz, David Schiffer, Calvin Ku, Alexis Angel

https://sites.google.com/mail.fhsu.edu/agricomtraining

## The Team:

Alexis Angel has yet to work in the field of computer science; however, she is well-experienced in documentation as well as the presentation of projects. Her main strength in coding is HTML with Javascript, so she can focus on helping make that functional and pleasing to the eye, but she does know other languages such as C++ and Java, so she can help debug others' code.

With a background in technical-level project-related work, Mr. Katz's strengths have been in line with data and project management to adhere to quality standards and help realize the potential with goals in mind realistic to the talent available. He has familiarity with Javascript and c++ but works primarily with excel to manage data and construct java related products with the assistance of HTML and CSS.

Dave Schiffer's background is in business analytics with a strong focus on supply chain projects. He has worked primarily with the Microsoft suite of Business Intelligence tools such as Azure, PowerBI, and SQL Server to drive information flow through the business. He is comfortable in Java and JavaScript but most familiar with database infrastructure and architecture.

David Gladden brings a background with a concentrated focus on data, primarily through the Microsoft SQL Server services suite. Previously working on projects such as data warehousing, data processing, automation, and reporting, his knowledge base is expanding to the application layer while working mainly with Java and Spring Boot.

Calvin Ku has a background in Business Administration, and many of his duties were to organize and document procedures and policies. Calvin has not worked in the field of computer science either but is comfortable programming with Java and SQL.

**Project Description:**

Many companies in the agricultural trading industry need help training and keeping junior traders due to the difficulties experienced at the beginning of their employment in understanding the mechanics of buying and selling agricultural commodities on the marketplace. There is a steep learning curve that translates to sunk costs for the business due to the mistakes made while learning the industry, as well as frustration on the part of the junior traders at their lack of

success and leaving the company, wasting the investment made by the company. The expertise involved, specialized jargon, tribal knowledge, and minimal understanding of how outside pressures affect commodities can create conditions leading to failure.

Our platform presents the opportunity to dramatically increase the effectiveness of your training regimen by offering a monitored environment where the trainee can experience a simulated trading environment and learn from mistakes through regular coaching from mentors. The focus of this environment is to train those unfamiliar with commodities trading. However, for experienced professionals who want to game out certain scenarios or extend training on a specific agriculture product, they need help maintaining. A standard training method across your business will improve your traders' satisfaction as they feel comfortable with their role and allow you to change the training model to address future gaps. This ability will enable you to align all traders to the same methodology quickly.

The program will teach basic commodities trading concepts, such as utilizing futures contracts and options. A dictionary of terms will allow quick reference for industry jargon. It will also serve as an educational tool in teaching junior traders to use the information that affects their commodities and the importance of the relationship between supply and demand. We offer a simulated commodities market that will account for real-world changes and give the options available to a trader for buying, selling, and entering into contracts. A newsfeed will also be public to track events and have guidance to understand their impact on the agricultural supply chain.

There will be two roles for the users of this system, with either a manager or dedicated training professional being an administrator and the employee taking on the trainee role. After completing this training, you will have knowledgeable and capable traders across your business who can capitalize on opportunities to increase profits they otherwise will not have noticed.

Functional Features:

- User can register and log onto the program
- User can access user profile of commodities, account total, cash total, and holdings
- User can retrieve a pre-specified list of commodities' real time prices
- User can buy commodities by amount as long as their account still have cash
- User can sell commodities holdings as long as their account still holds a position
- Manager User can set which accounts they are supervising
- Manager User can set supervising account's starting total
- User can view newsfeed
- Trainee user can view educational information

**Plan of Work and Product Ownership:**

The team has identified and broken down components and functional features into a high-level grouping of items to be worked on by two to three team members. This will enable

each team member to effectively collaborate and work with at least one additional developer during the development of each functionality. These items will be further broken down into smaller stories as the design and development path is established. Having smaller sized development tasks will assist the team members in remaining focused and allowing each completed item to be unit tested while being added to the project's source code.

*User Interface Functionality* - Alexis, Chris

End users should be able to experience a unified outcome across mobile, tablet, and desktop browsers. The customer should be able to use major modern browsers such as: Firefox, Chrome, Safari, and Edge to view this experience. Login should be simple and readily available once on the website, and a link to UI for trading and seeing account status should be accessible from the home page. Trainee users can view educational information as tooltips when hovering over certain UI elements. End users should also be able to access the newsfeed easily and navigate through news posts without issue or delay.

*Account Portfolio Functionality* - David, Alexis

End users should be able to log in and access their user profile and a defined list of tradable commodities. They can also view their account information, including cash balance, current holdings, and account totals.

*News and Price Retrieval Functionality* - Dave, Calvin, Chris

End users should be able to access and view newsfeed information about agricultural commodities. Current prices from the predefined list of items are considered as close to real-time as possible.

*Account Permissions Functionality* - Chris, Alexis

End users should have separate account permissions established and implemented relating to trainee or manager-level licenses. Manager-level permissions will have elevated rights to enable them to assist the trainee accounts they are supervising. The end user can log in very straightforwardly to access the system. The user is also able to update their account information as well as log out of the system. Managers can control access to information and have the ability to restrict user access.

*Trading Functions Functionality* - David, Calvin

End users should be able to place purchase orders for commodities, given their accounts have a positive cash balance. Users can also place sell orders for commodity positions their funds are currently holding, and managers can see what accounts under them are trading.

**Contributions:**

David Schiffer started us with the project idea and wrote out the project description and contributed his introduction. David Gladden has written out the majority of the plan of work, his

introduction and helped with editing throughout the proposal. Calvin Ku has made many contributions on the details of each section as well as his introduction. Alexis Angel formatted throughout the document, wrote her introduction, and also helped add details in each section. Christopher Katz has helped refine sections and add details when needed as well as add his introduction. Overall, we contributed equally in the discussion of the proposal and worked together to get the document well written.