

User Manual

Spring 2023 Senior Design Project

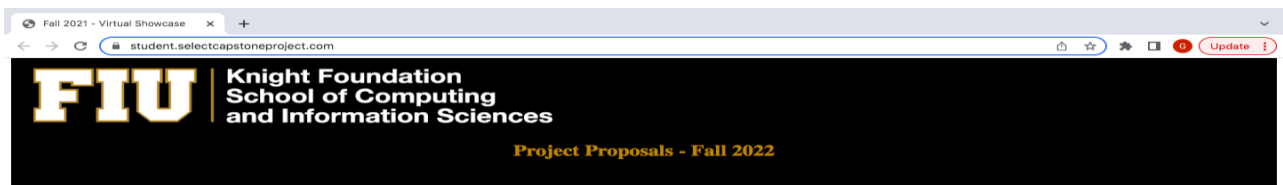
Student: German Alvarenga

Introduction

Right now, the selection system for the projects of Capstone 1&2 students is not secure enough. First, we thought it was the Excel sheet itself that had the security issue but in fact, it was the link itself that didn't have enough security to take care of the students' selection when they're choosing their projects for the semester. This is why we implemented AWS Security to a new website that should be an easy way for students to enjoy the class for the rest of the semester. Let me show you how to use it.

1st step:

The "USER" would need internet access to access this link <https://student.selectcapstoneproject.com/>, after clicking this link, the list of projects should come up on your screen, like below:



• **Project Title: AmLight - Learning OpenFlow/SDN network Research and Experimentation**

• **Project Short Description:**

The FIU's Center for Internet Augmented Research & Assessment (CIARA) is a center involved with the Internet of future, and it operates a network infrastructure that connects more than 1,500+ institutions in the U.S. and Latin America to the rest of the world. This network infrastructure is based on a new paradigm referred to as Software-Defined Networking (SDN), which brings new challenges and opportunities to those in the networking field. One of the challenges being faced by CIARA is the lack of tools to do network operation and troubleshooting. In previous years, some Python scripts were created to address the lack of network visibility, and some of these tools need to be enhanced. NO NETWORKING KNOWLEDGE is required to work on this project. Knowledge required: Python 3. Depending on the tool, the students can learn about PerfSONAR measurement tools, Zabbix, SDN, OpenFlow, OESS, FSFW, Kytos Napps, and more.

• **Mentors:**

- **Product Owner:** Vasilka Chergarova, Ph.D., IT Assistant Director, CIARA FIU, ychergar@fiu.edu
- **Professor:** Dr. Masoud Sadjadi, PhD, sadjadi@fiu.edu

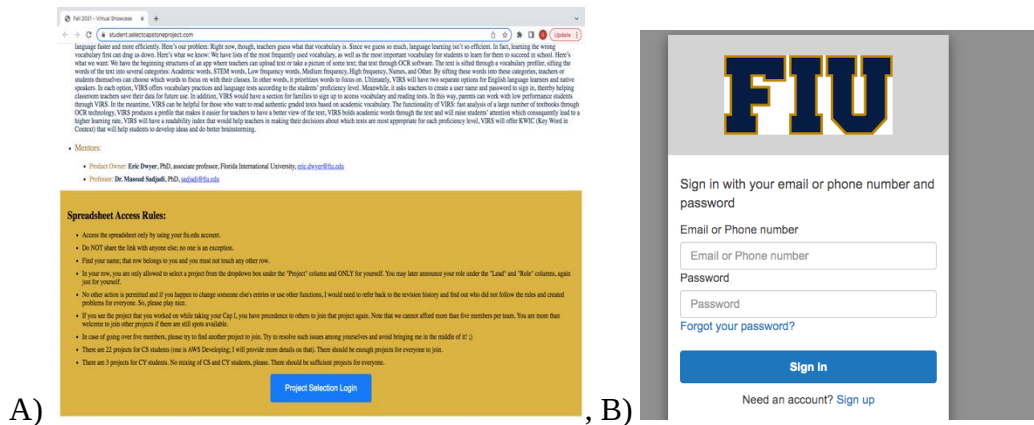
• **Project Title: App Development for Analyzing Biological Networks**

• **Project Short Description:**

A group of genes or proteins work together by forming a cluster, which could be a clique (complete graph) or clique-like structures, to accomplish different functions. These functions could be beneficial or adversarial such as initiation or progression of a disease. Usually, for a cancer to occur, a group of proteins work together, forming a clique-like structures, to initiate the disease. Then the transfer of disease signal to the next

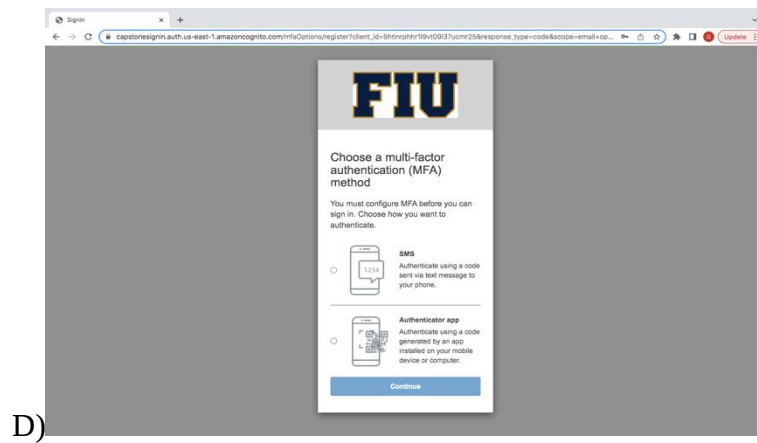
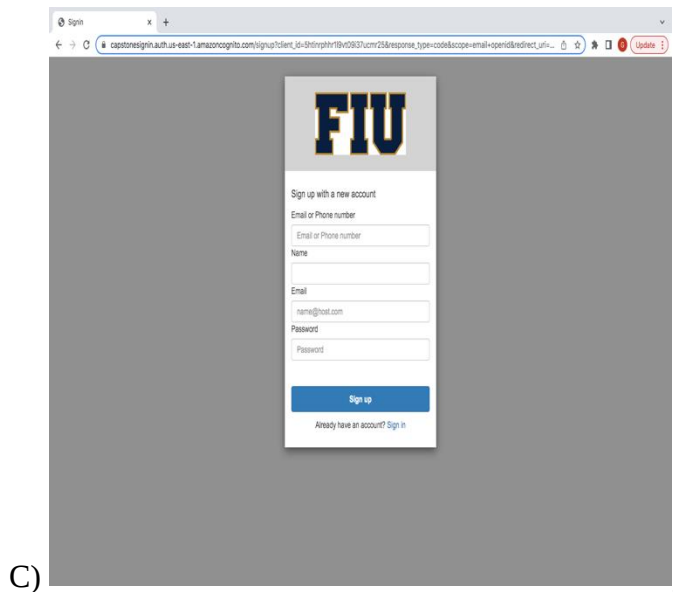
2nd Step:

The “USER” would need to read through the projects and the spreadsheet access rules, they would need to click on the blue button that says “Project Selection Login” to take the user to our new secure website by AWS Cognito, your screen should end up like figure “B” after clicking the blue button on Figure “A”:



3rd Step:

The user can't sign in yet so they would need to have an Authenticator app BEFORE continuing on signing up. After they click sign up on figure “B” and put in the credentials that are needed in Figure “C” then the user will be able to sign into the account they just created after they authenticate the account with the Authenticator app in figure “D”.



4th and FINAL step:

After the user inserts the authentication code after signing in, the “USER” will finally have access to the Excel sheet and select the project they’ll like to enroll if they’re following the spreadsheet rule your screen should be like Figure “E” below:

E)

my.sharepoint.com/:x/g/personal/sadjadi_fiu.edu/EeiA2-GrObdLoz7v4Z_o3xQB0E6z-pYnZe4MkWoodBIUBA?e=m5PR2A&code=109f75e0-969f-4799-...						
3 - Cap II and SP						
t Draw Page Layout Formulas Data Review View Help Table Design						
il 11 B General \$ 0.00 0.00						
f kreiz002@fiu.edu						
Names	Program	Level	Class	Mode	Project	Total
Reiz,Kathryna Sybille	Computer Science	Senior	Capstone II	Hybrid	Office Online Frame Coral Safari	6
Lopez,Rogelio	Computer Science	Senior	Capstone II	Hybrid	University Social App	5
Aviles,Sebastian Daniel	Computer Science	Senior	Capstone II	Hybrid	University Social App	5
Cala,Jr,Arquimides	Computer Science	Senior	Capstone II	Hybrid	University Social App	5
Gonzalez,Rebeca	Computer Science	Senior	Capstone II	Hybrid	University Social App	5
Venegas,Justin	Computer Science	Senior	Capstone II	Hybrid	University Social App	5
Perez,Evers	Computer Science	Senior	Capstone II	Hybrid	VIRS - Vocabulary in Reading Study	5
De Los Santos, Keiss	Computer Science	Senior	Capstone II	Hybrid	VIRS - Vocabulary in Reading Study	5
Megene,Kendy	Computer Science	Senior	Capstone II	Hybrid	VIRS - Vocabulary in Reading Study	5
Orozco,Jose	Computer Science	Senior	Capstone II	Hybrid	VIRS - Vocabulary in Reading Study	5
Zimmer,Kyle Keethan	Computer Science	Senior	Capstone II	Hybrid	VIRS - Vocabulary in Reading Study	5
Schnellinger,Ethan Michael	Cybersecurity	Senior	Capstone II	Hybrid	Capstone Project Selection Secured by AWS	5
Alberto,Damaso Emmanuel	Cybersecurity	Senior	Capstone II	Hybrid	Capstone Project Selection Secured by AWS	5
Almoshaikah,Fares Hamoud	Cybersecurity	Senior	Capstone II	Hybrid	Capstone Project Selection Secured by AWS	5
Alvarenga,German A	Cybersecurity	Senior	Capstone II	Hybrid	Capstone Project Selection Secured by AWS	5
Muniz,Manuel Alejandro	Cybersecurity	Senior	Capstone II	Hybrid	Capstone Project Selection Secured by AWS	5
Hill,John Clifford	Cybersecurity	Senior	Senior Project	Hybrid	Multifactor Authentication Enforcement tool	4
Barreto Henriquez,Stephanny	Cybersecurity	Senior	Senior Project	Hybrid	Multifactor Authentication Enforcement tool	4
Cuellar,Elsa Nell	Cybersecurity	Senior	Senior Project	Hybrid	Multifactor Authentication Enforcement tool	4
Esquierosa,Daniel Enrique	Cybersecurity	Senior	Senior Project	Hybrid	Multifactor Authentication Enforcement tool	4
Yauener,Marcos	Cybersecurity	Senior	Senior Project	Hybrid	Securing an AWS Serverless Application	5
Leal,Carlos Alberto	Cybersecurity	Senior	Senior Project	Hybrid	Securing an AWS Serverless Application	5
Pina,Sebastian	Cybersecurity	Senior	Senior Project	Hybrid	Securing an AWS Serverless Application	5
Sadiku,Nicholas	Cybersecurity	Senior	Senior Project	Hybrid	Securing an AWS Serverless Application	5
Simon,Michael	Cybersecurity	Senior	Senior Project	Online	Securing an AWS Serverless Application	5