# Capture the Flag: Concept Description

Name: CTF: Capture the Flag Cybersecurity Competition Practice

Client: Dr. Gowing: GlynGowing@letu.edu

Team:

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#### The Problem:

Students here at LeTourneau University have started to compete in a Cybersecurity competition called Capture the Flag, a contest where teams compete in knowledge and technical challenges as a test of current skills and in order to build skills as well. Currently, our team does not possess a means of practicing skills in the way they are presented during the contest, which does not allow them to prepare to the best of their ability. By creating a practice test environment, we will allow these teams to prepare effectively and in a way that is tailored specifically to the competition.

### Scope:

The project will consist of a working practice test environment for students to complete. It will supply a pool of questions for 5 categories: Forensics, Cryptography, Binary Exploitation, Reverse Engineering, and Web Exploitation. It will also provide any files needed to complete the question. The practice test will score participants individually and as a group based on their answers, the time it took to complete the questions, and the number of hints they received from the test.

#### Platform:

The project will be completed using the C# programming language. Dr. Gowing will provide the virtual environment that will be used to find the answers.

## **Deliverable and Time Frame:**

The date at which the project is projected to be completed on November 27, 2023.

#### Mission:

The mission of this project is to prepare the school's Cybersecurity students in practical and knowledge-based activities so they may showcase their knowledge to others.

## Agreement:

A clipping of the email where the scope of the project was shown. The client agreement was made in person.