



Miami University CTF System Proposal (Phase 1)

Description: Develop a Capture the Flag (CTF) system for the Cybersecurity Club. This system would be used for a future CTF competition.

Required skills: Familiarity with CTF events and willingness to work hard and learn new tools.

Constraint: For members of the Cyber Security Club.

Phases:

Proposal / Outline Phase - Further clarify the goals and the objectives of the project, with Dr. Bhunia, Professor Stahr, the Cyber Security Club, and any other relevant faculty and staff (may include members of new Cyber Security major)

Scouting / Research Phase - Find the Best CTF Platforms and solutions out there. Make an objective measurement of different platforms based on technical factors, ease of use, and beginner friendliness. Scout online resources, AI resources, government resources, and local industry resources.

Contact Phase- Reach out to resources from the Scouting Stage and gauge their willingness to help. Consider the financial cost, time, and resources involved in the project and make an overall project plan.

Build and Debug Phase - Once the plan is in place, begin development. Roll out the release to limited users (maybe just club/miami members) for alpha and beta testing.

Deployment and Continuous Development - Deploy the CTF with a few basic challenges and make a framework so that others can build upon it in the future.