# Platform Information – 3/24/2025 Updated

## Overview

* Project Name: Chess Plug
* Description: Chess Plug is a team based game, designed specifically for MSUM students and on the smoke Linux machine. Teams are semi-randomly generated, using players analytics and initial hard coded players to split and set up teams. All Data for game is stored on a GitHub that only a specific account has access to change or edit. A website, utilizing Microsoft OAuth2 login will allow students of MSUM not in smoke to better see the chess board and make votes.
* Contacts:
  + Judah Nava: 971-283-9880, [judah.nava@go.mnstate.edu](mailto:judah.nava@go.mnstate.edu)
  + Laween Al Sulaivany: [laween.al-sulaivany@go.mnstate.edu](mailto:laween.al-sulaivany@go.mnstate.edu)
  + Ben Johnson: [benjamin.johnson@go.mnstate.edu](mailto:benjamin.johnson@go.mnstate.edu)
  + James Zook: [james.zook@go.mnstate.edu](mailto:james.zook@go.mnstate.edu)
  + Donovan Morse: [Donovan.morse@go.mnstate.edu](mailto:Donovan.morse@go.mnstate.edu)
  + Ugnius Bieliunas: [ugnius.bieliunas@go.mnstate.edu](mailto:ugnius.bieliunas@go.mnstate.edu)
  + Jonathan Moritz: [jonathan.moritz@go.northlandcollege.edu](mailto:jonathan.moritz@go.northlandcollege.edu)

## Application Stack

* P. Languages and Frameworks:
  + Python (3.10.12 – smoke current install)
  + Flask – for hosting the chess website
* Pip Libraries/Dependencies:
  + chess
  + PyGithub
* Databases:
  + Github
* API’s and third-part integrations
  + Microsoft auth-oauth2
* Build tools and package managers
  + Pip

## Target Environment

* Operating System: Linux, Ubuntu 22.04
* Runtime Environment:
  + Python 3.10
  + Web server – Apache (smoke infrastructure)
* Hardware requirements: NA
* Deployment model:
  + On-premises: All backend services and website will be deployed to smoke.
  + Code Repository: All source code, documentation, and static data will be stored on GitHub (same repo as data).
  + Potential External Hosting: In the event of hosting the website is not supportable on smoke, the website can be hosted on chess.judahsbase.com

## Infrastructure

* Environments (Dev/Test/Prod):
  + All development, testing, and production use the same environment.
  + Testing is integrated into the production code and can be toggled using a command-line argument or runtime flag.
  + No separate stating or QA servers are used.
* CICD Pipelines:
  + No automated CI/CD pipelines are in place.
  + Code is manually built, tested, and deployed as needed.
  + Future considerations: explore lightweight CI (e.g. GitHub Actions) if automation becomes beneficial.
* Source Code Hosting:
  + Source code is hosted on GitHub in private repository.
  + Git is used for verions control, with branching and tagging used for managing releases.
* Monitoring and Logging Tools:
  + All monitoring and logging functionality is custom-built as part of the project codebase.
  + No external monitoring or log aggregation services are used.

## Security & Access

* Authentication method:
  + Website: OAuth will be used to authenticate users (Microsoft)
  + Smoke: Users are authenticated through existing Linux user accounts.

## Questions for IT

* Can a central account for chess be set up in smoke?
  + Host the website, own the cron, store the chess command?
* Does IT need anything regarding Monitoring and Logging?
* What are the expectations for addressing vulnerabilities?
* Is there an alternative solution if utilizing venv is not allowed?
* Is there specific documentation that IT would need about it?
* Does smoke have a schedule if and when it shuts down / restarts?