Criterion A: Planning

The Problem
A D&D Club officer is the client. They have scheduling issues as the Dungeon Masters (DM's) can't easily get a hold of their players to let them know when they'll be meeting. This leads to scheduling conflicts. Additionally, miscommunications occur frequently when DM's forget to remind players of an upcoming session. After consulting with them, I suggested they use a DM calendar system that automatically sends notifications and can be edited easily (See appendix)

Rationale for Proposed Solution
My application serves two purposes: keep track of D&D session dates and notify the appropriate users of upcoming sessions. This will be done with a user-friendly GUI where dates can be added and removed by the DM's.

To keep track of all the dates when sessions are planned, the needed data will be stored on a Google Sheet and accessed through the GoogleSheets API. This ensures all users will be accessing the exact same data, and any changes that one user makes will be seen by the rest of the users.

The application will notify user's automatically using the Discord API, because the D&D club already uses Discord as its primary communication tool. This is what makes my application a better alternative than preexisting calendar programs: it can directly notify users with custom messages on the messaging service they all already use and are organized on, Discord.

This will be programmed in Java because it has library support for the GoogleSheets and Discord APIs, it is possible to make user-friendly interfaces with JavaSwing, and it is highly portable. I also have experience using Java.

Success Criteria
1) The program notifies the correct players when there's a session
2) The program notifies the correct players of when a session has been canceled
3) DM's are able to add/remove session dates
4) DM's are able to add/edit session details such as group
5) Application has a user-friendly interface
6) Interface shows which dates have sessions planned
7) Interface shows which dates have canceled sessions

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