Knight Foundation School of Computing and Information Sciences

Senior Project, 2024, Summer

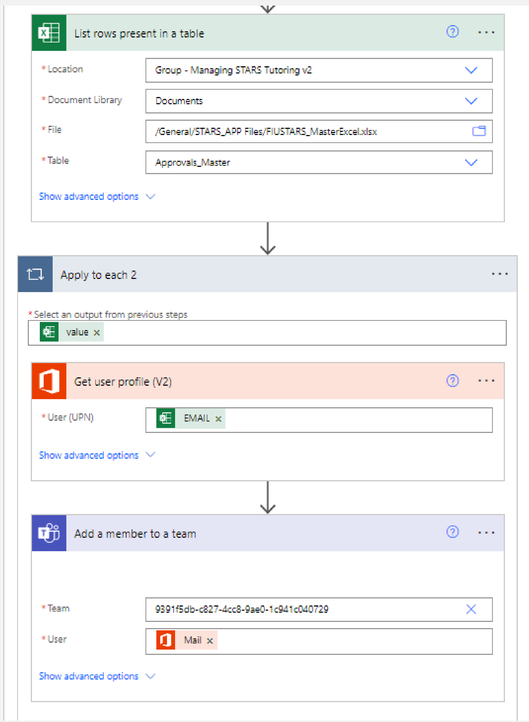
STARS Tutoring Management

Students: Roberto Vera, Kristy hamlin, Bryan Arango Cruz, Furzaan Khan, Frank Reloba
Mentor: *Patricia McDermott-Wells, Florida International University*
Instructor/Faculty: *Masoud Sadjadi*, Florida International University

PROBLEM

This project is an initiative to create an application using Microsoft's Power Apps to assist in managing student tutoring services offered by FIU. The problem of the app assigned to me was to implement a flow through power automate to add students and tutors to a created Microsoft Team's group and channel.

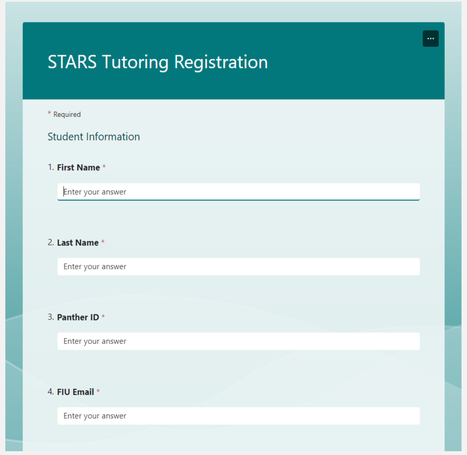
OBJECT DESIGN

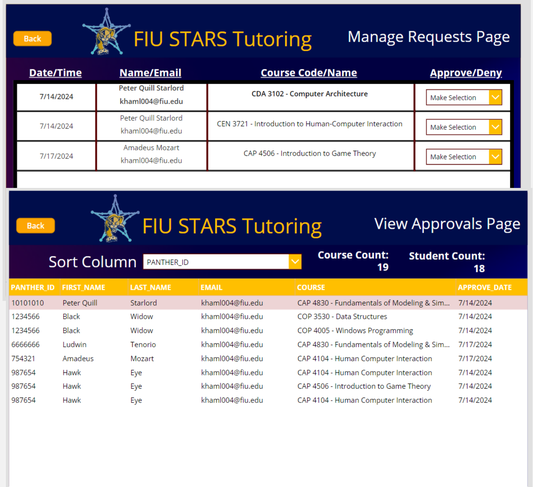


CURRENT SYSTEM

The current status of the application allows students and tutors to join the STARS Tutoring Microsoft Team's group by filling out an online form, which will automatically add them to the team once submitted.

SCREENSHOTS





SYSTEM DESIGN

```
{
    "inputs": {
        "host": {
            "connectionName": "shared_office365users",
            "operationId": "UserProfile_V2",
            "apiId": "/providers/Microsoft.PowerApps/apis/shared_office365users"
        },
        "parameters": {
            "id": "@items('Apply_to_each_2')?['EMAIL']"
        },
        "authentication": "@parameters('$authentication')"
    }
}
```

```
{
    "inputs": {
        "host": {
            "connectionName": "shared_teams",
            "operationId": "AddMemberToTeam",
            "apiId": "/providers/Microsoft.PowerApps/apis/shared_teams"
        },
        "parameters": {
            "teamId": "9391f5db-c827-4cc8-9ae0-1c941c040729",
            "body/userId": "@outputs('Get_user_profile_(V2)')?['body/mail']"
        },
        "authentication": "@parameters('$authentication')"
    }
}
```

REQUIREMENTS

The app must be able to do the following:

- Student must be automatically added to a Microsoft Teams channel when their request for tutoring is approved.
- Tutors must be automatically added to a Microsoft Teams channel when they are approved to tutor it.

IMPLEMENTATION

The system/app was implemented using Microsoft's Power Apps and Power Automate, which facilitate the creation of an app through the use of premade functions.

- Microsoft Power Apps was used to create the application itself as well as the user interface.
- Microsoft Power Automate was used to create the code and flows for the application, which were responsible for its overall functionality.

VERIFICATION

Purpose: Verify that users are automatically added to Microsoft Team's group after submitting the required online form.

Preconditions:
- The user has a licensed Microsoft 365 account.
- The Microsoft Team's group has already been created.

Input:
- User fills out online form with the required information.
- User submits the form.

Expected Output: User appears as a member of the Microsoft Team's group.

SUMMARY

The implementation was successful. After students submit the online registration form with valid information and licensed emails, they are automatically added to the STARS tutoring Microsoft Team.

ACKNOWLEDGEMENT

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