## Team MicroRTS

Miguel, Matthew, Ilias, Narayan, Shay

Meets Tuesdays & Thursdays at 11:00am

#### **Project Description**

Creating an AI bot for a real time strategy game called MicroRTS in Java.
 MicroRTS is a deterministic rts where player actions are durative and can be issued simultaneously. It's the most basic version of a RTS game compared to games like StarCraft and Dune spice wars which helps in testing theoretical ideas at a basic level.

### Technology and Operating Systems

- Matthew Primarily Windows 10 machines
- Ilias Windows 11 Laptop
- Narayan Windows 11 Laptop
- Shay Windows 11 Custom PC
- Miguel-

#### Tool chain and Library

- Oracle Java
- Apache NetBeans (IDE)
- Visual Studio Code
- Github
- Github Codespaces
- Using the MicroRTS Libraries provided in the Open Source repository by Farama Foundation
- https://github.com/Farama-Foundation/MicroRTS.git

#### Progress and Plans

We plan to implement a search based breadth first AI then possibly implement further abstractions and/or constraints on its behavior as needed to increase speed. The main road block we see is with the performance especially on larger maps and in games where many units are created.

# Grading Items

#### Meeting Attendance Sheet

09/14/2023 - Shay (Missed with notice/reason)

09/19/2023 -All members attend

09/26/2023 - Miguel (missed)

#### Matthew Berry

Ohio ID, Github Username: mb135821, MatthewBerry135821

Commit URL:

https://github.com/OU-CS3560/microrts-f23/commit/be70e9bc2961834b94b52ac9 02db265e2a1db678

```
git --no-pager show --shortstat --format=medium be/0e9b
commit be70e9bc2961834b94b52ac902db265e2a1db678
Author: Matthew Berry <112725096+MatthewBerry135821@users.noreply.github.com>
Date: Tue Sep 19 17:33:15 2023 -0400

Added Initial Function Declarations

Added declarations and descriptions for the main functions we initially need

1 file changed, 34 insertions(+), 8 deletions(-)
```

#### **Akshay Patel**

Ohio ID, Github Username: sp550519, Shayz614

Commit URL: https://github.com/OU-CS3560/microrts-f23/commit/16e0cc6b342f97160cc0da72b086214f0147edc9

Commit screenshot-

```
git --no-pager show --shortstat --format=medium 16e0cc6
commit 16e0cc6b342f97160cc0da72b086214f0147edc9 (HEAD -> main, origin/main, origin/HEAD)
Author: Akshay Patel <77766318+Shayz614@users.noreply.github.com>
Date: Wed Sep 20 18:29:21 2023 -0400

Timebudgetproto Shay's commit

1 file changed, 17 insertions(+), 2 deletions(-)
```

### Ilias Baktybek

Ohio ID: ib873519, Github Username: iliasbaktybek

Commit URL: refactored code base · OU-CS3560/microrts-f23@137a01e (qithub.com)

Commit info/screenshot

```
git --no-pager show --shortstat --format=medium 137a01e
commit 137a01e69a8e1ff2185979ebdad0f7e05a277fbd (HEAD -> main, origin/main, origin/HEAD)
Author: iliasbaktybek <ilias.baktybek@gmail.com>
Date: Tue Sep 26 12:02:29 2023 -0400
refactored code base
1 file changed, 26 insertions(+), 13 deletions(-)
```

### Narayan White

Ohio ID, Github Username: nw566721

Commit URL:

Commit info/screenshot: I found out what the move function does in micoRTS. For some reason I wasn't added onto the classroom repository so I could not submit anything

#### Name

Ohio ID, Github Username:

Commit URL:

Commit info/screenshot