GAME AI CAPSTONE
#SQUAD

TEAM SQUAD
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GOALS

The primary objectives of implementing player navigation, effective supporting AI, dynamic formations, and contextual player-AI interaction.

Navigation was addressed by modifying the core files.

Behavior trees were the primary means of implementing the companion AI with the contextual player interaction.

Ultimately, the project was a success, and the grand objective of supporting the player was achieved.

APPROACH

Healer

- Separate spec for behavior
- On Bark: head to Hero to heal
- Default: passively find/heal Companions
- Formation

Player Navigation

- WASD
- Shoot in direction of cursor

Effective Companion AI

- Behavior trees
- Cover system

Dynamic Formations

- Triangle shaped formation relative to player position
- Area-of-effect attacks

Contextual Companion Interaction

- E key for barking
- Context of situation fed into metrics to be evaluated by spec tree

DEMO DEMO DEMO

CONCLUSION

The approach was found to be very effective in supporting the player's objective to destroy the enemy base.

Challenges:

- Improving and modifying the core files to enable navigation
- Identifying the coordinate transformation necessary to transform Cartesian and polar coordinates -> game world.
- Identifying the best way to implement barking.

All of the main topics addressed in the homework assignments were featured, and the addition of the player tied the Game AI theme of improving the player experience into the course.