

# TODO

**4th March 2022**

**Participants:** Guowen Liu, Yan Zhu, Huibo He, Yu Xin

**Topic:**

- Talk about the main content of this project
- Discuss the time of the next meeting

**Summary:**

- Decide the theme of this project: A chasing game between “police” and “thief”.
- Next, every Friday will be the fixed meeting time.

**Completion and contribution :**

Name	Task	Devoted Time	Status
All members	Team up and send an email to the teacher.	40 minutes	Done

**Next week's task:**

Name	Task
All members	Read the relevant papers and think about the algorithms that can be used.

**11th March 2022**

**Participants:** Guowen Liu, Yan Zhu, Huibo He, Yu Xin

**Topic:**

- Talk about the academic article found and express each one's thoughts on the topic
- Decide which algorithms to choose to implement.
- Assign everyone's task

**Summary:**

- Choose A\* algorithm, Genetic algorithm, and Q-learning algorithm

**Completion and contribution :**

Name	Task	Devoted Time	Status
Yan Zhu	Read the relevant papers and think about the algorithms that can be used	60 minutes	Done
Yu Xin	Read the relevant papers and think about the algorithms that can be used	60 minutes	Done
Huibo He	Read the relevant papers and think about the algorithms that can be used	60 minutes	Done
Guowen Liu	Read the relevant papers and think about the algorithms that can be used	60 minutes	Done

**Next week's task:**

Name	Task
Yan Zhu	Learn about genetic algorithm
Yu Xin	Learn about Q-learning algorithm
Huibo He	Learn about genetic algorithm
Guowen Liu	Learn about A* algorithm and how to build game environment

**18th March 2022**

**Participants:** Guowen Liu, Yan Zhu, Huibo He, Yu Xin

**Topic:**

- Check the project progress
- Everyone talks about what they learned last week

**Summary:**

- The project has set up a game environment, which can control the movement of police and thief characters
- Team members can apply the algorithms to each role next week.

**Completion and contribution :**

Name	Task	Devoted Time	Status
Yan Zhu	Learn about the genetic algorithm and the basic use of the package pygame	180 minutes	Done
Yu Xin	Learn about the Q-learning algorithm and the basic use of the package pygame	240 minutes	Done
Huibo He	Learn about the genetic algorithm and the basic use of the package pygame	180 minutes	Done
Guowen Liu	-Learn about the genetic algorithm and how to build the game environment -Set up the game environment	720 minutes	Done

**Next week's task:**

Name	Task
Yan Zhu	Apply the genetic algorithm to the game roles.
Yu Xin	Apply the Q-learning algorithm to the game roles.
Huibo He	Apply the genetic algorithm to the game roles.
Guowen Liu	Apply the A* algorithm to the game roles.

**25th March 2022**

**Participants:** Guowen Liu, Yan Zhu, Huibo He, Yu Xin

**Topic:**

- Check the project progress
- Talk about the evaluation criteria of the chasing game

**Summary:**

- When the game is over, the number of steps taken by both sides is used to evaluate the algorithm

**Completion and contribution :**

Name	Task	Devoted Time	Status
Yan Zhu, Huibo He (Pair programming)	Apply the genetic algorithm to the police role	480 minutes	Done
Yu Xin	Finish the Q-learning algorithm to the police role	360 minutes	Done
Guowen Liu	Finish the A* algorithm to the police role	180 minutes	Done

**Next week's task:**

Name	Task
Yan Zhu	Evaluate the genetic algorithm and try to apply it to the thief.
Yu Xin	Evaluate the Q-learning algorithm and try to apply it to the thief.
Huibo He	Evaluate the genetic algorithm and try to apply it to the thief.
Guowen Liu	Evaluate the genetic algorithm and try to apply it to the thief.

**1st April 2022**

**Participants:** Guowen Liu, Yan Zhu, Huibo He, Yu Xin

**Topic:**

- Check the project progress
- Assign the task of report and presentation

**Summary:**

- Group report: Guowen Liu, Yan Zhu, Huibo He, Yu Xin
- Presentation: Guowen Liu, Huibo He, Yu Xin
- Meeting minutes arrangement: Yan Zhu

**Completion and contribution :**

Name	Task	Devoted Time	Status
Yan Zhu	Record the evaluation of the genetic algorithm and apply it to the thief role	240 minutes	Done
Yu Xin	Record the evaluation of the Q-learning algorithm and apply it to the thief role	240 minutes	Done
Huibo He	-Record the evaluation of the genetic algorithm -Add the function of plotting for evaluation	240 minutes	Done
Guowen Liu	-Record the evaluation of genetic algorithm and apply it to the thief role -Beautify the UI of the game	300 minutes	Done

**Next week's task:**

Name	Task
Yan Zhu	Write the group report and arrange the meeting minutes
Yu Xin	Write the group report and record the project video
Huibo He	Write the group report, make ppt and show it
Guowen Liu	Write the group report and record the project video

**8th April 2022**

**Participants:** Guowen Liu, Yan Zhu, Huibo He, Yu Xin

**Topic:**

- Check the progress of what needs to be submitted
- Submit all the reports

**Summary:**

- We have done all the things that needed to be submitted
- Submit them when it's proper

**Completion and contribution :**

Name	Task	Devoted Time	Status
Yan Zhu	Write the group report and arrange the meeting minutes	240 minutes	Done
Yu Xin	Write the group report and record the project video	240 minutes	Done
Huibo He	Write the group report, make ppt and show it	240 minutes	Done
Guowen Liu	Write the group report and record the project video	240 minutes	Done

**Next week's task:**

Name	Task
All members	Submit assignment 2 on balckboard