

# AI Algorithm for Reversed Reversi

## 1 Overall Description

Reversed Reversi is a relatively simple board game. Players take turns placing disks on the board with their assigned color facing up. During a play, any disks of the opponent's color that are in a straight line and bounded by the disk just placed and another disk of the current player's color are turned over to the current player's color. The object of the game is to have the **fewest discs** turned to display your color when the last playable empty square is filled.

In this assignment, we use the default board of size **8\*8** board (administrators can modify the settings as needed). Students need to implement the AI algorithm of Reversed Reversi according to the interface requirements and submit it to the system as required for usability testing and round-robin.

The Project is divided into two phases, each with one or two weeks for coding or improving your current coding.

	Evaluation Rule	DeadLine
Phase 1	Score according to the number of test cases passed	2022/10/14 Submit to platform
Phase 2	Score according to the ranking in the round robin	2022/10/28 Submit to platform
Reversed Reversi AI report		2022/10/31 Submit to sakai

After Phase 2, a carefully-written experiment report needs to be submitted.

$$\text{Coding\_Score} = (\text{Phase1} + \text{Phase2}) / 2$$

$$\text{Project1\_Score} = \text{Coding\_Score} * 0.7 + \text{Report\_Score} * 0.3$$

## 2 The Use of the Platform

The Reversed Reversi platform <http://172.18.34.89:8080/> is logged in with the student ID and password. The default password is the student ID. At the first login, the system will remind you to change the password. After logging in successfully, you can see the below interface.