

CS 4850 - Fall 2024

SP-14 GREEN - Novel Chess Game

Group Members:

Joshua Peeples, Matthew Corvacchioli, Allen Smith, Dylan Luong, Ashton Miller

Professor and Date:

Sharon Perry – December 2nd, 2024

Project Website:

<https://sp-14-green.tiiny.site/>

GitHub Repository:

<https://github.com/S-14Chess-p/Senior-Project-ChessAI>

Project Team

Roles	Name	Major responsibilities	Contact (Cell Phone)
Team leader	Allen Smith	Schedule and plan workdays, ensure teemembers are cooperating and working effectively together, assist development, and other duties as needed.	(770)-316-8065
Team members	Joshua Peeples	Plan out the game features. Develop the chess functionality and rules.	(912) 322-5940
	Matthew Corvacchioli	Oversee website development, Assist with the development of the AI, and ensure all team members are on the same page	(706) 867-5941
	Dylan Luong	Create and update documentation for the program. Note differences between versions with version control.	(229)-251-8853
	Ashton Miller	Coordinate Design, Assist with Web Development and Documentation	(678)-245-1880
Advisor / Instructor	Sharon Perry	Facilitate project progress; advise on project planning and management.	770-329-3895

1.0 Project Overview / Abstract (Research)

We seek to create a novel version of the classic game of chess that can be played against an AI or against another player. We will develop an intuitive UI which will allow the user to easily select if they want to play vs AI or against another player, and the capabilities of the AI will expand as far as we can take it in the allotted time. We will start by creating the user interface and the logic for the chessboard and pieces before moving onto AI development. AI competency will be expanded as far as possible given the available time.

2.0 Project website

<https://sp-14-green.tiiny.site/>

Deliverables

1. Develop a user friendly and easy to use playable game similar to the style of Chess.
2. Develop an efficient AI that is capable of giving a single player a challenge, but is not too difficult to beat.
3. Develop an intuitive tutorial that is easy to understand for any player even those that have never touched the game before.
4. Develop a clean user interface that gives every user a good user experience.
5. If there is time, allow players from 2 different devices to play together.

Milestone Events (Prototypes, Draft Reports, Code Reviews, etc)

#1 Pre-Presentation Development

#2 Prototype Development

#3 Final Package Development

#4 C-Day

Meeting Schedule Date/Time

We will meet every Thursday at 4:50pm for roughly 30 minutes.

Collaboration and Communication Plan

Group me and Discord have both already been created.

Project Schedule and Task Planning

Project Name: SP-14-Green																							
Report Date: 9/1/2024																							
Phase	Tasks	Complete%	Current Status Memo	Assigned To	Milestone #1		Milestone #2			Milestone #3				C-Day									
					09/09	09/16	09/23	09/30	10/07	10/14	10/21	10/28	11/04	11/11	11/18	11/25							
	Review requirements with SH	10%		*	6		6		6		6		6										
	Get sign off on requirements	0%	Will add more figures	Allen		10	4																
Project design	Define tech required	0%		*																			
	Website design	0%		Matthew, &		5	10	10															
	UI design	0%		Allen, Ashton,	10	15	5				5												
	Game Logic design	0%		Dylan, Joshua	6	6	10	10															
	AI design	0%		Joshua, & Matthew	16	16	12	12															
	Develop working prototype	0%		Joshua, & Matthew				10	10														
	Test prototype	0%		Allen, & Ashton					30	10		5											
Development	Review prototype design	0%							8	5	10												
	Rework requirements	0%		Matthew		3			8	20	15	15											
	Document updated design	0%		Ashton, Dylan				8	15				10	10									
	Test product	0%		*								30	15	20									
Final report	Presentation preparation	0%		Matthew													15			30	10		
	Poster preparation	0%		Ashton, Dylan																		10	
	Final report submission to D2L and project owner	0%		Allen																		1	
Total work hours					663	48	52	56	50	52	41	47	55	57	45	30	21						

Legend	
Planned	
Delayed	
Number	Work: man hours
*	All members assigned
&	Other members assist

Version Control Plan

We will be using Github to manage our version control