CSC 478 - Group 2

Project Members:

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**Project Idea:**

UNO in the browser

**Deliverable 1**

Browser-based UNO game

Compatibility with all major browsers: Firefox, Chrome, Edge. Since it will be browser based, it should work on all major OS’s.

Game will support 1-3 players and a computer player (All playing locally, no networking based multiplayer).

Game will always include a computer opponent to play against. The game will not include any AI/ML, computer will use basic logic with randomization/prioritization to decide on actions.

The game will be written using JS/HTML/CSS, using the React library (Tentative goal is to use React. vanilla JS is a fallback)

The goal is to not need the software to need to interact with any other systems. No server, backend, networking, APIs, etc. It will all run locally on the user’s browser. React is an external dependency that will be included.

Game will use a UI in the browser to display the cards, users , and state of the game. Tentative goal to include fancy messages & notifications to the users. (Wild card celebration screen, card popups, etc)

**Org Chart**

Chris – Programmer  
Sai – Tester  
Johnny - Documenter

**Gnatt Chart**

**Tools and Standards**

HTML, Javascript, Python

Notepad ++, Notepad, Word, PowerPoint

VSCode, Eclipse, Notepad++

UML Modeling Tools

**Process Model plan to follow (e.g., coding standards, documentation standards, etc.)**

**Configuration Management Plan**

**Deliverable 2**

**Requirements Documentation**

1. Introduction

~~1.1 Purpose of the requirements document (You can ignore this one.)~~  
1.2 Scope of the product — just use your scope statement from your project plan  
here

1.3 Definitions, acronyms, and abbreviations — list and define all of these that  
appear in your documentation  
1.4 References — include references for anything that is trademarked or copyrighted  
here (e.g., game instructions, algorithms such as the LZW compression  
algorithm for images, etc.)  
~~1.5 Overview of the remainder of this document (You can ignore this one.)~~

2. General description

2.1 Product perspective — give a little background about why the software is being  
built and why it will be useful; one good paragraph will do

This game is being built to serve a high demand of competitive players who cannot determine who is the best at the traditional game of UNO. Players span from various countries around the globe and there are various slight deviations to the game. The software will serve as a standardized gameplay to distinguish the top player per game.

2.2 Product functions — describe fundamentally what the software will do; again,  
one good paragraph will suffice, and you do not need to go in depth (the  
specific requirements section will cover the in-depth functions)

The product will play the game of UNO in a web browser that will allow up to 3 players and a computer to play the game. This game is based on the standard rules of uno found at : https://www.ultraboardgames.com/uno/game-rules.php . Players will be able to see their hands when it is their turn to make their move and they will be able to see the public game information on the screen. When a user makes a move the system will take the appropriate action and then pass to the next player.

2.3 User characteristics — describe who the end users will be

The end users of this system will be the at home players and the professional uno players of the world

2.4 General constraints — describe the general limitations of your software (e.g.,  
system limitations, does not work over a network, etc.)

The goal is to not need the software to need to interact with any other systems. No server, backend, networking, APIs, etc. It will all run locally on the user’s browser. React is an external dependency that will be included.

2.5 Assumptions and dependencies — examples of these would be: assumes end  
user has QuickTime installed; requires Visual Basic runtime to be installed on  
end user’s computer

It is assumed that the user will have a functioning computer and a web browser that can run HTLM/CSS/Javascript. React will also be required but provided.

3. Specific requirements

**Design Documentation**

Architecture diagrams

Web Browser?

Pseudocode

Start Game  
 -Draw Cards

Decision Tables

Control Diagrams

Source Code Documentation

Testing Documentation

Known Bugs and Issues

**Deliverable 3**

User’s Manual

Installation Instructions

1. System requirements  
2. Installation instructions  
3. Any known issues that might affect installation or use  
4. Basic troubleshooting if the software won’t install

-Install browser

-Install plugins

-Set optimal screen resolution

**Deliverable 4**

This is the executable software, along with all data files, library files, drivers, and any  
other file necessary for the software to be used.

1. You should assume the end user might be someone who doesn’t necessarily have a lot of technical computer experience; i.e., usability is a high priority. Don’t make unfounded assumptions about the intuitive capacities of your end users.
2. You need to have an installer program that installs the application on the user’s  
   computer. This can be a full-fledged installation wizard or a simple batch file, depending  
   on the requirements of your application. Do not use a trial version of an installer,  
   since they often only work for a limited period of time. There have been cases  
   where I was unable to install students’ software because the trial installer they used  
   had expired by the time they turned in their projects.
3. Depending on the size of your final project, you may be able to simply post it to  
   Blackboard. If you do this, please package everything into a single zip file, and post  
   the zip file. If your project is too large to post on Blackboard, you should make  
   arrangements for a version that can be downloaded via some other means.