

Project 1
CSC 4370/6370 WEB PROGRAMMING
Fall 2025
Due date: 10/22/2025 – NO Exceptions NO Lates
(All groups)

Grouping breakdown

1. Each team is assigned by the web-pro management team see i-college for group listing.
2. The groups are assigned based on the current class roster size.
3. **Please see the group list posted online via I-college and Discord.**

This is an excellent opportunity to improve your skills as a *team player*, a highly desirable type of worker in the real world. (See link [Here](#))

The Project will involve creating a 10 to 15-minute PowerPoint presentation, which should be aligned with the course project content. Excitingly, you have the freedom to select a topic that genuinely interests you, allowing you to express your creativity and showcase the results of your efforts. The project doesn't need to be overly intricate; instead, focus on being imaginative and enjoying the process.

Today Class Schedule

1. **Meetup with team-members**
2. **Choose a leader - liaison to the instructor**
3. **Brainstorm ideas**
4. **Plan how you will collaborate/communicate**
5. **Choose someone to "integrate" the parts done by the team members**

Objective: Create and showcase the user interface or front-end for a chosen topic. This project will not aim to be a fully operational system, and there are no intentions to expand its functionality beyond this demonstration.

- a) Please designate one team member as the project leader responsible for project coordination and reporting to the instructor. Additionally, ensure that you monitor the time invested by each team member in the project.
- b) Each group is required to create a PowerPoint presentation lasting between 10 to 15 minutes to showcase the completed project.
- c) In addition to your project submission, please provide a summary on a separate (Introduction page), well-designed webpage using a styled div, including the following information:
 - **Leader's Name**
 - **Project Title**
 - **Project Description:** A brief one-sentence description of your project
 - **Team Members:** A list of your team members (last and first names) along with their respective project responsibilities."

REQUIRED:

Please use either the leader's name or the project name as the folder name.

Before the presentations, we highly recommend each member upload the content (URL)(mandatory) to the Codd server.

Required: Please establish a dedicated folder and consolidate all project-related files within it, including uploading your code to GitHub. Ensure that all code work, from inception to completion, is available on GitHub. At any point, we may request random access to your work and engage in dialogue via your project's assigned account.

Keys to the PowerPoint presentation.

Team Organization - You have the flexibility to structure your team in a way that suits your project's needs. Two common approaches are:

User, Designer, Coder/Programmer, Tester Model

- a) Assign team members to roles such as User Representative, Designer, Coder/Programmer, and Tester.
- b) Each team member focuses on their respective area of expertise to contribute to the project's success.

Architect/Chief Programmer Model with Programmer Teams

- a) Appoint an Architect or Chief Programmer responsible for the project's overall design and coordination.
- b) Form smaller programmer teams, with each team working on specific components or modules of the program.
- c) Foster collaboration and communication among teams to ensure a cohesive final product.

Presentation Structure (10 - 15 minutes):

- a) To effectively present your project, consider the following structure:

Introduction (PowerPoint Slide Show)

- b) Begin with a PowerPoint slide show to introduce the problem you're addressing.
- c) Clearly articulate the problem statement, its significance, and the goals of your project.
- d) Highlight any relevant background information.

Demo Run

- a) Perform a live or recorded demo run of your project.
- b) Showcase the project's functionality and how it addresses the identified problem.
- c) Provide real-world examples or scenarios to illustrate its practical applications.

Code Highlights (Code-Wise Presentation)

- a) Share key aspects of your project's code.
- b) Explain the architecture and design principles that underpin the code.
- c) Highlight significant features or algorithms used in the project.
- d) Emphasize any innovative or unique coding approaches.

Q&A and Discussion – not required

- a) Open the floor for questions and discussion.
- b) Encourage the audience to ask about specific code details, design choices, or project challenges.
- c) Engage in a meaningful dialogue to showcase your team's expertise.

Conclusion and Next Steps

- Summarize the key takeaways from your presentation.
- Discuss the project's achievements and its potential impact.
- Mention any future plans or developments, such as updates, enhancements, or additional features.

Project Ideas: Design and Implementations Using CSS (Transforms, Transitions, Animation) Only (Be Creative) - you have to option to add your own – must include in the proposal)

The Objective:

Develop a visually engaging and interactive web interface that demonstrates mastery of **CSS transforms, transitions, and keyframe animations** without using JavaScript. This project challenges you to combine **layout design, motion principles, and responsive styling** to create an experience that is both functional and aesthetically appealing. You will select **one theme-based concept** and bring it to life through **pure CSS animations**, focusing on **user interaction, storytelling, and accessibility**.

Your goal is to:

- Plan and design** a creative interface using wireframes and motion storyboards.
- Implement responsive layouts** using CSS Grid and Flexbox.
- Apply motion thoughtfully** to enhance usability and engagement, not just decoration.
- Demonstrate originality** by customizing themes, colors, and animation timing.
- Document your process** through annotated CSS and reflection on design decisions.

About the Projects: Motion-First UI with Pure CSS (Transforms, Transitions, Animations)

What you will do : Build an interactive, visually engaging interface using **only HTML + CSS** (no JavaScript). Apply CSS transforms, transitions, and keyframe animations to create meaningful motion.

What Are Stretch Goals?

Stretch Goals are **optional, advanced features** that go beyond the basic requirements (Core Features). They are designed to:

- Challenge you to explore **more advanced CSS techniques**.
- Add **extra polish and creativity** to your project.
- Help you **stand out** by demonstrating deeper understanding.

Important:

- You **must complete all Core Features first** before attempting Stretch Goals.
- Stretch Goals are **not required for passing**, but they can earn **bonus points** and improve your grade.
- They should **enhance the user experience**, not just add complexity.

14-Day Milestone Schedule

Day 1–3 (Due 10/12/2025): Proposal & Design Plan

- Submit **topic choice + concept brief** (theme, color scheme, target audience).
- Include **wireframe** (hand-drawn or digital) and **motion storyboard** (describe at least 3 animations: what, why, when).

Day 4–7: Static Layout Build

- Create **HTML + CSS layout only** (no animations yet).
- Submit **annotated CSS** explaining layout decisions (Flexbox/Grid usage, responsive strategy).

Day 8–11: Motion Integration

- Add **CSS transitions and keyframes** for interactions and sequences.
- Submit **animation map**: diagram showing triggers, timing, and easing for each animation.

Day 12–14: Final Polish & Accessibility

- Add **reduced-motion alternative** using @media (prefers-reduced-motion).
- Ensure **responsive design** for mobile and desktop.
- Submit **reflection document**: explain how animations improve UX (not just decoration).

Project Topics (Choose ONE)

Each topic includes **Core Features** (must-have) and **Stretch Goals** (you must implement 2) Should you do all you will get extra credit).

1) Card Table “Dealer Demo” – Black Jack or Baccarat - ONLY

Core Features:

- **Shuffle Animation**: Animate cards fanning out and stacking using @keyframes.
- **Deal Sequence**: Cards slide to player positions using transform: translate() with animation-delay.
- **Chip Hover Effect**: Chips scale up slightly and glow using box-shadow on hover.
- **Theme Customization**: Use CSS variables for felt color, chip colors, and table border.

Stretch Goals:

- **3D Perspective**: Apply transform: perspective() and rotateY() for realistic card angles.
- **Dealer Burn Card**: Animate a card sliding off the deck before dealing.
- **Hover Peek**: Slightly lift a player’s card on hover using translateY and rotate.

2) Slots/Reel Showcase

Core Features:

- **Reel Spin**: Use @keyframes to scroll symbols vertically in a loop.
- **Staggered Stop**: Apply animation-delay so reels stop one after another.
- **Win-Line Highlight**: Flash a border or glow effect using animation: alternate.
- **Theme Toggle**: Light/Dark mode using CSS variables and prefers-color-scheme.

Stretch Goals:

- **3D Reel Illusion**: Use transform: rotateX() for a cylindrical effect.
- **Blur During Spin**: Apply filter: blur() while reels are moving.
- **Confetti Animation**: Create falling shapes using @keyframes and position: absolute.

3) Racing HUD + Lap Replay

Core Features:

- **Car Path Animation**: Animate a car icon along a track using translate() and @keyframes.
- **Speedometer Needle**: Rotate a needle using transform: rotate() with easing for acceleration.
- **Flag States**: Animate background color changes for green/yellow/red flags.

Stretch Goals:

- **Weather Overlay**: CSS rain effect using ::before with @keyframes for falling drops.
 - **Pit Stop Sequence**: Animate car stopping and panels sliding in/out.
 - **Split Times Panel**: Slide-in leaderboard using transition: transform.
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4) Interactive Recipe Microsite such as Domino's Pizza

Core Features:

- **Recipe Card Animation:** Flip or scale cards on hover using transform: rotateY() or scale().
- **Step-by-Step Instructions:** Animate steps appearing one by one using opacity and translateY.
- **Ingredient Checklist:** Style checkboxes with animated checkmarks and color changes.
- **Hover Highlight:** Change background or add glow when hovering over ingredients.
- **Responsive Layout:** Use CSS Grid or Flexbox for mobile-friendly design.

Additional Criteria:

- **Typography & Color Scheme:** Use readable fonts and consistent color palette.
- **Accessibility:** Ensure text contrast and focus states for keyboard navigation.

Stretch Goals:

- **CSS-Only Filtering:** Use :checked selectors to show/hide recipe categories.
 - **Animated Nutrition Bars:** Animate width of bars using @keyframes.
 - **Image Gallery:** Responsive grid with hover zoom and smooth transitions.
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5) Adventure Game (Text-Based Story with CSS Animation)

Develop an imaginative and immersive **text-based adventure game** with CSS-animated storytelling elements.

Choose ONE Theme:

- **A. Space Explorer** – Explore planets and alien civilizations.
- **B. Underwater Odyssey** – Dive into ocean ruins and treasure hunts.
- **C. Time Traveler's Tale** – Fix anomalies across different eras.
- **D. Fantasy Forest** – Encounter mythical creatures and hidden secrets.
- **E. Haunted Mansion** – Solve mysteries in a ghost-filled mansion.
- **F. Magical Academy** – Learn spells and uncover sinister plots.

Required Features:

- **Scene Navigation:** Use :target or details/summary for navigation without JavaScript.
- **Scene Transitions:** Apply fade or slide animations using opacity and transform.
- **Animated Text Reveal:** Create typewriter effect using @keyframes and steps().
- **Character Animations:** Animate silhouettes or icons entering/exiting scenes with translateX and opacity.
- **Responsive Design:** Ensure readability on mobile and desktop.

Stretch Goals:

- **Branching Paths:** CSS-only navigation using :checked or :target.
 - **Parallax Effect:** Layered backgrounds moving at different speeds using transform: translateZ().
 - **Theme Switch:** Day/Night mode with smooth transitions.
 - **Sound Integration (Optional):** Add <audio> tags for background music (no JS).
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Please see my demos of CSS resources below

- [Notes on Transforms Transitions & Animation](#)
- [CSS SAMPLE CODE AND EXAMPLES](#)

Decide the responsibilities of each team member. e.g. (To-do list)

Team Roles and Responsibilities:

Designers (All Members)

- a) Collaborate with the User to define program requirements.
- b) Create user interface sketches.
- c) Design the program, outlining classes, fields, methods, objects, etc.
- d) Develop pseudocode for all methods.

Programmers (All Members)

- a) Implement the program by writing code for all components.

Testers (All Members)

- b) If applicable, formulate a comprehensive test plan.
- c) Include test procedures, test data, bug tracking, and reporting methods.
- d) Prioritize identified bugs.
- e) May assist in bug fixing.
- f) Compile information from team members for the PowerPoint presentation.

Kanban Methodology (Required)

- a) Implement the Kanban methodology, conducting daily Kanban meetings.
- b) Concentrate on specific work areas.
- c) Provide a detailed summary of how the Kanban methodology was applied and its benefits.
Include this information in the PowerPoint presentation with a labeled section on the advantages of the Kanban methodology.

Graduate Students

- a) **Must** introduce creative extra features or unique concepts into the project.

Project Planning

- b) Collaboratively establish a project schedule.
- c) Estimate hours required for each project phase.
- d) Determine communication methods, timing, and locations for coordination.
- e) Utilize Discord as a primary communication platform for all team members.

Throughout the course, guidance and support will be available, including dedicated class time. Feel free to reach out for assistance and utilize Discord as a means of communication and collaboration.

Presentation Day Requirements - Summary

- a) Prepare a PowerPoint Presentation of 10 - 15 Minutes - Please refer to the specified requirements below.
- b) Utilize conference call recording software like Zoom, WebEx, or Microsoft Teams to deliver your presentation.
- c) Establish a YouTube channel and post your video following the provided guidelines - Refer below for specific instructions.

- d) Obtain the video link source and submit it to the designated Dropbox location listed on i-College.

PowerPoint slide show should include the following:

- ✓ User - statement of problem, and general requirements (inputs, outputs, etc.)
- ✓ Design - Overview of the solution, key design features, user interface, UML class diagrams, pseudo code using Transforms, Transitions, and Animation.
- ✓ Testing - (if applicable) how tested (e.g., test plan, data used, tracking and reporting bugs, bugs fixed/not fixed, etc.)
- ✓ **Give your Group a Team Name that's tied to Web Technologies Development Project.**
- ✓ You will choose the presenters in order. All members must be involved in the presentation. One person will do the slide show, and a second team member will demo the or each team member may wish to present his own work.
- ✓ Please use PowerPoint to present be sure to **insert your code snippets** with slides.

About the YouTube Channel

Create a YouTube channel that will be used to present your work

Title Video: i.e. "Name of the task CSS Project 01_TeamName "

- ✓ This video should range from 10 - 15 minutes.
- ✓ Every team member must participate in this video and must cover a key feature.
- ✓ Create a channel at YouTube and name it as your group name
- ✓ All group members must submit a copy of the work

Submission Instructions:

To ensure accurate grading, all students are required to upload the YouTube URL in a Text file and furnish a GitHub repository link directing to the current work submission for assessment. Merely submitting the file will not suffice for evaluation. You should not just upload the files to Git Hub but use Git Hub for continuous development and we will check the commit history.

List of links to use and determine your recording presentation software

1. [Zoom](#)
2. [Microsoft Teams](#)
3. [WebEx](#)
4. [Additional Software you can consider](#)
5. Discord

How to create a YouTube channel? Let's start with the basics

1. Sign into YouTube and click on the user icon at the top right of the screen.
2. Click on the gear icon to get to your account's YouTube Settings.
3. Click on Create a new channel.
4. Then choose "Use a business or other name"
5. Add your Brand name and click create.
 - ✓ Once ready, upload the video to your channel.
 - ✓ Include the link to this channel with your submission and you will
 - ✓ Incorporate the video for the core of your PowerPoint presentation.
 - ✓ Use this channel for uploading future videos.

Grading Criteria

Please see the [Presentation grade sheet](#) link to be clear on what you will be graded on.

Your grade will be determined by the following criteria:

- Effective application of the "state of being."
- Presence of a title
- Correct HTML/CSS – Use of Transforms, Transitions, and Animation (required)
- Aesthetic choices:
 - Font choice
 - Color choice
 - A clear focal point.
- Creation of a reasonably complex layout (multiple divisions/content areas), although there may be exceptions to this expectation.
- Creativity
- An appropriate design for the selected "Topic"
- Consistent design for the entire site (implementing the use of Transforms, Transitions and Animations)
- Easy-to-use and logical navigation
- Application of good design principles
- Effective use of images, color, and typefaces
- "Everything working"

If you fulfill the specified requirements (please refer to the Requirements section above), you will be awarded full credit. To receive credit, your team must adhere to the designated submission guidelines for both the paper and presentations. Merely submitting the files to iCollege will not be considered adequate. It is imperative that you also upload the project to the CODD server, and all team members must ensure their projects are posted on Dropbox. Additionally, it is advisable for all members to share the Dropbox links to ensure accurate grading and reporting of your grades.