

Casters & Coders



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Problem Statement

Some people might want to learn basic programming with little to no background knowledge, so we set out to create a game which:

- Has coding as a main gameplay mechanic
- Teaches basic programming concepts
- Requires little to no background knowledge
- Is fun to play



Requirements & Constraints

Functional:

- The player must write scripts to perform actions
- Scripts will interact with puzzles through a predetermined API

Resource:

- The game should run at 60 fps on minimum specs
- Minimum spec constraints are:
 - AMD A10-5800k CPU with Radeon HD 7660D iGPU
 - 4 GB of Ram
 - 10 GB of hard drive capacity

Qualitative:

- The game should have engaging puzzles
- The game shouldn't be frustrating

Economic:

- The game should be free and open source
- Only free and self-made assets will be used

UI:

- The game should be highly accessible
- Navigating the UI with only a keyboard should be possible
- The game should use colors which are friendly to color-blindness

Engineering Standards

The standards we will be following:

- [The IGDA Crediting Standards Guide](#)
 - Effectively credit all contributors
- [The IGDA Crunch, Unsustainable Work, and Management Abuse Standard](#)
 - Avoid unsustainable or excessive working practices
 - Show better respect to group member
- [The Microsoft .NET C# Coding Conventions](#)
 - Majority of project will be done in C#
 - Help maintain code-style consistency

Who will benefit from our project?

- **Students:** By making programming accessible and enjoyable, more students may be encouraged to pursue careers in technology and related fields.
- **Teachers:** By incorporating a game-based approach to learning programming, teachers can help their students better understand the concepts and engage them in the learning process.
- **Educational institutions:** By providing access to our game, educational institutions can enhance their curriculum and better prepare their students for future careers in technology.
- **Tech Industry:** By making programming more approachable and enjoyable, help increase interest in the field and ultimately contribute to the growth and innovation of the industry.