Legends of Learning & IGDA

Game Design Challenge

About the Game Design Challenge

With many schools adopting a virtual or hybrid plan this school year, students are missing out on the opportunity to engage in hands-on STEM experiences with their friends and classmates. To help fill this void, and encourage learning, computational thinking, and fellowship, Legends of Learning and International Game Developers Association (IGDA) are hosting a month-long Game Design Challenge. This virtual experience will enable K-12 students to learn more about game development and practice critical thinking and project management skills.

We are excited to provide all learners with an opportunity to design a game, no matter their device-access, age, or previous experience. Depending on the grade level and experience of the participating students, there will be two different tracks they can participate in:

- Fully build out a video game, using their choice of platform
    - Examples: CORE, Unity, Game Maker, Scratch, RPG Maker
- Create a paper prototype and game design document

Game Design Challenge Resources

Students can use the following resources as part of their participation in the game design challenge.

- Game Design Challenge YouTube Lessons
- Game Design Challenge Lesson Plans
- Mentor / Questions Email: events@legendsoflearning.com
- Game Design Challenge Sign-up Form
- Weekly Twitch Presentations

Digital Game Development

Students with an understanding of software and development are encouraged to try to develop a digital version of their design. There is a wide range of software available for this kind of development, which includes, but is not limited to:

Beginner Game Development Software

- Scratch
- CORE
- RPGMaker

Intermediate Game Development Software

- GameMaker
- BuildBox
- Flowlab.io

Advanced Game Development Software

- Unity - C#
- Unreal Engine - C++ and visual scripting

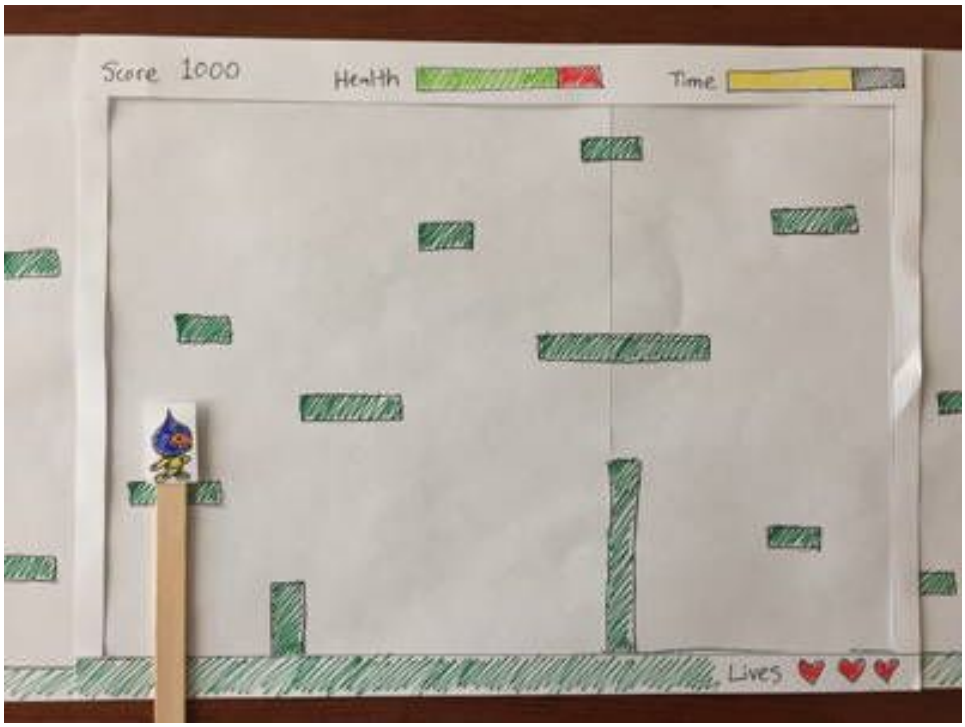
Paper Prototype Development

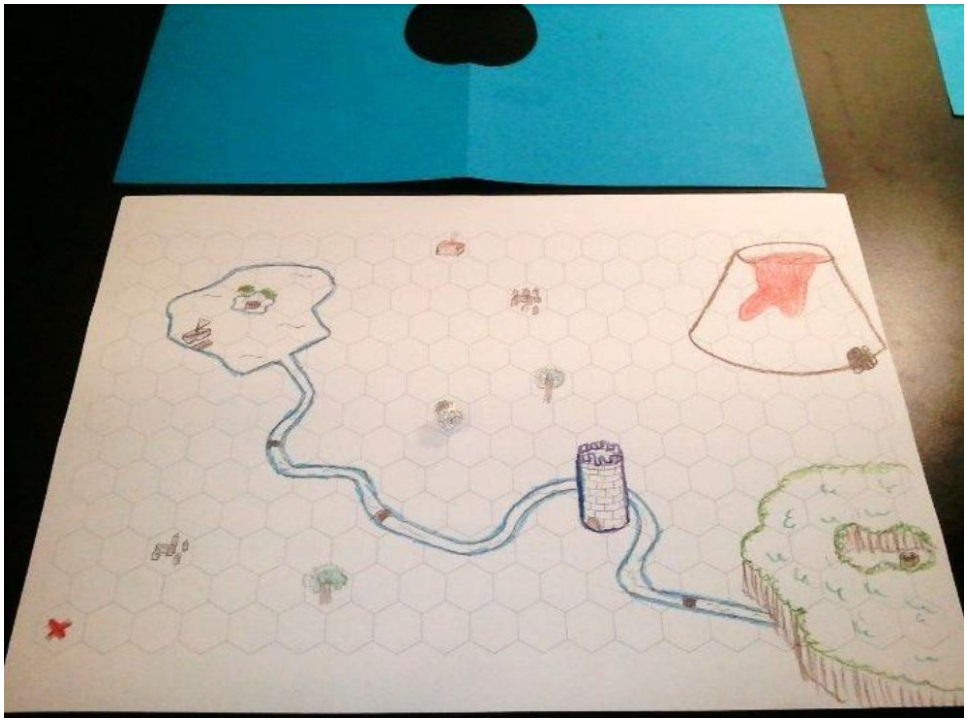
Students who are less familiar with technology are encouraged to create a paper prototype, as they can focus on problem-solving and planning without being distracted by wrangling software and technology.

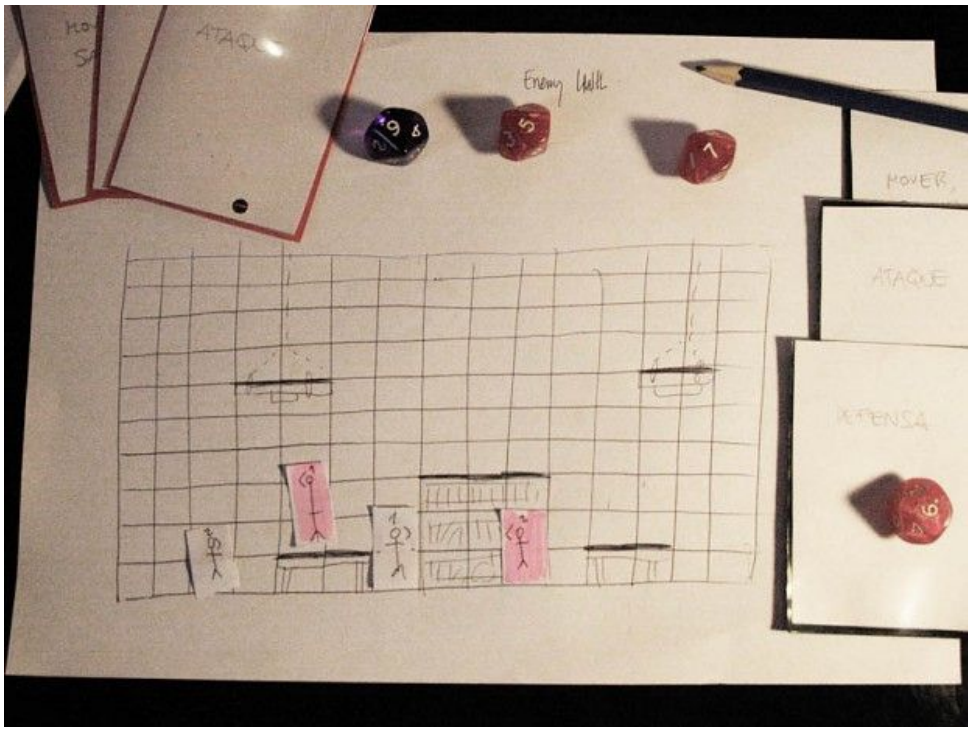
Recommended Materials:

- Paper (blank and/or graph paper)
- Scissors
- Pens, pencils, or markers
- Ruler
- Clear adhesive tape
- Dice / counters (optional, depending on design)

Paper Prototype Image Examples:



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