

## Team 7 Game Milestone Two: Minimal Playability

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### Game Proposal Features

Week: February 8

- Gameplay
  - Basic visual effect of projectiles (small squares travelling in straight line)
    - Completed. All projectiles rotate and render correctly. Gameplay is smooth for 2 minute execution time, and (actually) has good replay value. (Half of our group is trying to compete for a high score.)
  - Implement skill system. (not all skills, maybe with limited visual effects)
    - Completed - after every 20 enemies killed with MP-consuming ability, the skill levels up by using more MP, increasing in damage, and increasing in projectile count. However, this was set out initially during our plans, and we were far too ambitious towards what we can create. Please see modifications on document for newest milestone proposal version.
  - Implement interactions between different classes (hero, enemy)
    - Completed. Enemies are skilled and increase in difficulty with better AI and increased speed as the score rises.
  - When projectiles hits, destroy the projectile, and apply damage. Projectiles has direction. (momentum may apply later if have no time)
    - Completed; momentum is also completed, which was something that was planned for a later stage.
  - Basic enemy AI (decision tree, random behaviors based on distance, hp )
    - Completed. (@Max please fill in something nice for the huge amount of work u did here)
  - Show basic UI (HP, MP, player level, map level), reset game after death
    - Completed (Rendering team). Decided that basic UI with text display is not very valuable for the player, and instead implemented March 8th milestone's UI, with a graphical display. See "Creative Section".
- Rendering & basic physics-> camera & collision start
  - Basic momentum with deceleration
    - Completed (Gameplay team). Implemented momentum on collisions with boundaries (not previously mentioned - see "Creative").
  - Start Screen Rendering
    - Completed - not originally planned in this milestone. (Closest resemblance to milestone belongs in creative

- Asset
  - more details in assets
  - Map details design
- Verify on track for milestones

Week: February 15

Spring Break: A few team members out of Canada

- Progressive debug
- basic user tutorial/help (Just for basic actions such as move and attack)
- Finish whatever is left from last week

### Milestone requirements

Milestone: Minimal playability - Feb 22, 2019

For this milestones you should continue to support all required skeletal game features. You should augment those with core gameplay logic, incorporate additional assets and features that allow for non-repetitive gameplay, introduce basic user help, and perform playability testing.

(75%) Milestone requirements:

- ❑ Sustain progressive, non-repetitive gameplay using all required features for 2 min or more (assume that you can provide users with oral instruction).
- ❑ You should implement state and decision tree driven (possibly randomized) response to user input and game state (create a decision tree data structure and reuse it for multiple entities)
- ❑ Provide extended sprite and background assets set as well as corresponding actions.
- ❑ Provide basic user tutorial/help.
- ❑ Stable game code supporting continuing execution and graceful termination.

(25%) Creative: You should implement one or more additional creative elements. These can include additional assets, rendering effects, complex gameplay logic, or pre-emptive implementation of one or more features from subsequent milestones.

- ❑ Hero can level up when he reaches certain points. The level-up can currently improve the ice arrow skill by increasing the number of arrows, range of arrows and damage. For the hero himself, the level up can increase the speed of recovering mp.
- ❑ Momentum System - an impulse is given when hero collides with map boundary
- ❑ Hero bounces off from map boundary
- ❑ Enemies' strength(attack speed, movement speed etc) increases as score increases.
- ❑ Hero is animated with spritesheet, original graphics (designed in-house) are used in all assets
- ❑ UI is graphical and displays HP and MP in real time; essentially the version needed for March 8th plan

