

Permafrost Tilter - Conception

Actors

- **Zone** - defines a zone that is used by other actors
 - **EffectArea** - Deals a defined **damage type** of a certain amount in a **Zone**
 - **Trigger** - Is a **Signal** that is active when the **Player** is inside a **Zone**
- **Text** - draws text on the screen
 - **Button** - draws a contour around a **Text** and makes it clickable
 - **MoveView** - is a **Button** that moves the view to a new position
 - **SelectLevel** - is a **Button** that starts a defined **Level**
 - **Quit** - is a **Button** that quits the game
- **Cursor** - draws a sprite at the mouse cursor's location
- **Projectile** - is a class that groups up functionalities for different projectiles
 - **Fireball** - is a **Projectile** that bounces 5 times and disappears
 - **Snowball** - is a **Projectile** that leaves a snow pile on the solid it hits.
 - **Arrow** - is a **Projectile** that stays stuck on the **Actor** it hits
- **Particle** - draws a particle used in large numbers to do particle effects
- **PoufEffect** - a smoke cloud animation used when actors disappear
- **Mob** - a basic definition for mobs, it uses the **MobState** enum
 - **IceBlob** - a **Mob** with a defined behaviour
 - **BossBlob** - a **Mob** with another behaviour than an **IceBlob**
- **Exit** - a door that is open/closed by default, and can be opened using a **Signal**
- **Activator** - a element the player can interact with to give it certain **Keys** to send a **Signal**
- **Key** - a pickup that the player can use to activate **Activators**. **Keys** is an enum of possible keys
- **Lever** - turns on/off when interacted with, resets after a defined amount of time. Sends a **Signal**
- **PressurePlate** - when the player steps on it, it sends a **Signal**
- **Block** - a solid box with a defined skin
 - **Destruct** - a destroyable **Block**, disappears when hit by a **Fireball** (fire damage)
 - **Door** - a **Block** that uses a **Signal** to disappear
 - **Mover** - a **Block** that uses a **Signal** or a boolean to oscillate between two positions
 - **Trap** - a **Block** that uses a **Signal** to shoot **Arrows**
 - **Terrain** - a **Block** with better draw function and friction depending on a **Material**
 - **Sign** - a **Block** that is not solid anymore to draw a sprite that shows the player the way
- **Worm** - Actor that moves and can be picked up by the player (used for last level)
- **Tree** - Actor with fun a interaction with the player
- **Torch** - can be on/off can use a **Signal** and sends a **Signal**
- **StuckItem** - Used to stick an a imobile Actor to another one (visual only)
- **Spike** - Actor that deals physical damage to another actor
- **SnowStorm** - Actor with **Particule** effects using air damage to blow the **Player** into a direction
- **Portal** - Uses a **Signal**, when active and the player touches it, it launches next level
- **PlayerDead** - draws a dead player with an animation where the player died
- **Player** - User controlled actor
- **Overlay** - draws a UI to help the user, it is linked to the player
- **Limits** - draws an outline, when outside, the actors are most of the time deleted
- **Ladder** - Actor which removes gravity and gives 2 degrees of freedom (climb around)
- **Jumper** - Actor that deals air damage on collision
- **Heart** - Actor that deals heal damage on collision
- **Cloud** - Actor with **Particule** effects of falling snow
- **Background** - Actor that is used to draw the backgrounds in the levels
- **Constant** - A **Signal** that is always Active/NotActive using a boolean

Packaging modification

We changed the packaging to clean up the actors and have all actors of a certain type together for instance the UI actors are all in the same package or the projectiles using the projectile super-class are also in a package together. We made this choice to make importing easier. We only have to import the wished package without importing the entire actor package or importing them one by one.