Game Design Document

**Diurnal Code**

*A Turn-Based Healing Game*

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# Overview

Diurnal Code is a Turn-Based game based off of the typical role of a healer in Computer and MMO Roleplaying Games. (More specifically, it is a recasting and reinterpretation of my main character's experiences in Sabrous MUD restructured and framed specifically to convey the kind of feelings I had near the tail end of my participation in that game.)

The player is given the role of Kilo, a young Sabrecat Mender from born and raised in the small settlement of Tech. He is tasked with healing the residents and guards of Tech in service to his people. His performance is graded regularly based on efficient cycling of RES, minimizing casualties, and overall helpfulness. Good performance helps him grow faster, which in turn makes him more capable to protect his people from greater threats, like bandits, raiders, and other beings that wish harm on the Tech populace.

Gameplay is largely centered on unit growth, as the status of the guards and the player character persist from mission to mission. All units are able to gain 'experience' through practicing techniques or witnessing combat. Experienced gained raises a unit's HP, Potency, Resilience, and ACT stats, and may allow a unit to learn special techniques that can make them even more dangerous in combat, or a more capable counter to the violence.

While the player, as Kilo, will be given some capacity to defend himself in 1v1 combat, the goal is seldom to defeat any units as loss of life- even those of hostiles- runs counter to the Diurnal Code Kilo is sworn to uphold, and is punished. (Even if the experience gain from the combat may compensate for performance bonuses lost.)

The game is also supposed to have a story element that starts with Kilo as a child in a monastery, learning the basics of his role as a mender; a brief view of his experiences meeting one of his first friends, who teaches him the basics of combat and defends him from a sloppy thief; His adolescent experiences meeting and speaking with a Razordaemon for his first time and making a friend who teaches him new magic... the day before the friend attacks some of the guards to steal a key and flees; his meeting of a Normus thief with a crush on him, who swears not to steal in the city if he'll hide her from the guards; And his experience struggling to fight off a coordinated assault against Tech to meet up for a planned party with his childhood friend. A lot of those story elements might never be implemented into the game depending on how long it takes to implement core functionality.

# Game Flow

## Main Menu

### Start New Game

Lets the player start a new game from the main menu. This immediately leads to the game's introductory cutscene, and then the healing/mending tutorial level.

## Options

If offering tools like key-remapping or sound volume controls, they should be able to be changed at any time.

### Save Game

The player should be able to save their current state in a level at any time in a level when the save game option is selected from in game. There should be multiple slots to save in, and the player should be given the option to name the save.

### Load Game

The player should be able to load their progress at any time, replacing their current status. Display a notification that any unsaved progress will be lost and confirm that the player wishes to load.

## Cutscenes

Cutscenes take after visual novels. Character art is displayed over a background, and a text box is displayed atop the character art. Conversations can be advanced or reversed by tapping on displayed buttons.

## Combat

Turn order is determined based on the ACT of all characters' ACT. At the start of a level, the ACT is queried for all existing units, and placed on a turn order list decide when units get their chance to act. [TK] - I did a writeup on this earlier. Refer to the Weekly Reports, most likely somewhere between 4 and 6.

Flowchart for ATK or TECH use. <http://retl.deviantart.com/art/Diurnalcode-Arrow-And-Other-Design-397948063?q=gallery%3ARetl%2F46088230&qo=6>

### In-Combat Cutscenes

Cutscenes and dialogue messages can be displayed during combat, overlapping the overview mode display during a level.

# Scoring and Victory

# Objectives and Failure Conditions

# Levels

At most, a day has 1,000,000 time units before night starts. At night, the level ends and a score is tallied. Kilo returns home to sleep for the night while another team of menders takes over. (Would be nice to have the last story level be a night level, but save that kind of thing for last.)

## Healing Tutorial

Kilo as a child is trained up by monks in the monastery to be an effective mender in service of Sun.

## Combat Tutorial

Kilo as a child was playing a game with his best friend until some bullies picked on her for being unable to read. Things went to blows. (Low potencies make for low chance of death. Player & Ally VS 3 bullies. All bullies gang up on last Allied token to attack. Char has higher DEF than Kilo.)

## Hello World

It's been a few years. Kilo spends some time catching up with a friend, who is now a member of the guard. He soon learns of the mess thieves on the loose and snoozing gate guards can make.

## What is a RazorDaemon?

Vettarival happens. Balloon tokens unlocked. Short scenario with thieves to test out new skill.

## Sleeping on the Job

A bad idea. Organized bandit assault on East gate.

## A Thief Out for a Heart

# Setting

## The World Outside (In Brief)

The world outside is a fractured land filled with all sorts of creatures and beasts and plants and other settlements. The main center for Moon-fanatic Razordaemons lies far to the South-East of

## The Flow

Tek starts with a flow of 10k. Each character's maximum HP is taken from The Flow while they live. Each character's current RES is t aken from or added to The Flow as it is gained or expended. Dying characters can only revive at the spawn cell if there is enough Flow at the time of their death.

At the start of each token's turn, the amount of RES they are given [is proportional to the time since their last turn] is equal to a fourth of their maximum RES.

## Goddesses and Blessings

## The Town of Tech

### Monastery and Tower

Where Kilo was raised.

### The Town

Peeps live there.

### The Gates

West, East, South.

### The Guard

There's 12.

### The Shops and Populace

### Culture and Religion

(An explanation of what exactly the Diurnal Code is would go somewhere in this section.)

(Note: [This page](http://retl.deviantart.com/art/Diurnalcode-Thumbnailsandstuff-397948109?q=gallery%3ARetl%2F46088230&qo=5) of paper notes was some of the initial ponderings on 'races'.)

The primary sentient beings of importance to Tech are Sabrecats, Normus, Humans, Inhumans, and Razordemons.

Sabrecats are

Normus are

Humans are

Inhumans are

Razordemons are

# Tokens and Units

## Core Stats

The core stats that all tokens and units share are HP, RES (Resource), POT (Potency), DEF (Defence. [TK] Could this be renamed to PROtection?), ACT (Action), ALN (Alignment), XP (Experience), and LVL (Level).

HP represents an entity's physical Health and physical wellbeing If this drops to 0, the entity will be unable to move, and will gradually die.

RES represents the amount of resources an entity can draw from flow and actively manipulate in a dynamic form. In standard RPG terms, this would be most similar to Mana Points.

DEF is

ACT is

ALN is

XP is

Level is

Array List of Effects, Effects have Duration, Stat Boost, and Amount. All of these sum together for cummulative stat at start of turn? and get updated each turn?

### Stat Growth

## Archetype/Role/Class

The core archetypes are Menders, Divinities, Thieves, and Guards.

[TK] Come back to this link when dealing with Divinities: <http://retl.deviantart.com/art/Diurnal-Code-Icons-and-Symbols-396488306?q=gallery%3ARetl%2F46088230&qo=7>

## Techs

Techs are learned at each level of experience. The techs learned differ for the archetype a unit is following.

All living units have the basic no-cost 'tech(s)' Attack at level 0. Because of that, the generic Attack is not considered a tech.

**Tech List for Menders**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Level** | **Base**  **RES Cost** | **Tech Name** | **Description** | **Result** |
| 1 | 20 | Cure Light | Call upon Sun's light to mend flesh with a cheery, warm, light. | Restores 15 HP to all tokens in a target Adjacent or Standing cell. |
| 1 | 5 | Create Food/Water | Creates apples, crackers, or water to stave off hunger and thirst. A moderately simple beginner skill for the Flow-affinitive types. Good for training skills, cycling Flow, and for feeding the city. Great for supporting civil life, or for assisting adventurers. Not useful in combat. | When successful, displays a flavor message about the food or water it created. It is not a usable item. |
| 1 | 0 | Aid | Share soothing words and apply a series of low-cost physical measures to keep the patient alive. | SINGLE TARGET ONLY. Adjacent or Standing Cell only. Same effect as Cure Light, but free to use. |
| 2 | 50 | Float |  | ALWAYS CASTER ONLY. ACT + 5 for 5 turns. Does not stack. |
| 3 | 20 | Protection |  | ALWAYS CASTER ONLY.  Defense + 5 for 5 turns. Can stack. |
| 4 |  | Radiance | Draws from the power of Sun for a minor blessing in the form of a warm magical glow that improves attack power. Great for lighting up dark spaces, but not good for sneaky sorts. | When successful, adds a boost to POT of the recipient that will last for the recipient's next three turns. |
| 5 | 25 | Cure Serious |  | Restores 50% HP to all tokens in a target Adjacent or Standing cell. |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
| 9 |  | Cure Critical |  |  |
| 10 |  | Block |  | Passive. |
|  |  |  |  |  |
| 11 |  | Fly |  | ALWAYS CASTER ONLY. |
| 12 |  | Sanctuary Recall | Draws the caster back to the place they spend the most time. Until the end of their next turn, they have increased DEF. |  |
| 13 |  | Heal |  |  |
| 13 |  | Meditate |  |  |
| 15 |  | Fortify |  |  |
| 15 |  | Second Attack |  | Passive. Any use of Attack now has a chance (75%) to land a second hit. |
| 14 |  | Major Invocation |  |  |
| 14 |  | Harm |  |  |
|  |  |  |  |  |

## The Player Character - Kilo

[TK]

## Balloons

Check here: <http://retl.deviantart.com/art/Diurnal-Code-Icons-and-Symbols-396488306?q=gallery%3ARetl%2F46088230&qo=7>

## NPCs

Gate Guards

City Guards

Cleric Menders

Kits

Residents

## Cells

[TK] Different cells may affect stats of all units in the cell. Very small (+0.05 - +0.10) percentile bonuses to things.

## Misc

Divinity Symbol

# Combat

This section explains details on combat rules.

## Time and Turn Order

Time passes linearly forward, and no amount of RES allows for time to rewound.

The Turn Order Indicator displays the icons of tokens with upcoming turns and at what time they will have their turn.

Turns are calculated at the start of battle. Each unit reports its ACT to the game controller, which then divides a Time Constant (Arbitrary, as long as it is at least as large as the maximum possible legal ACT score. For starting, we're going to assume the constant is the length of a whole day, and the length of a day is 1000 units). This gives a period. The controller multiplies the period to place them throughout the whole day's TOI.

If a token is defeated, all of its turns are removed from the TOI. If a unit is newly added to the playing field, its turns are immediately calculated and added to the TOI, starting from the current in-world time. (In world time is updated each time a unit takes a turn, to the time of their turn.)

Sells that affect ACT like fly and float remove all of the affected token's turns, and then readds them from the current time with the adjusted ACT. When spell effects like fly or float wear off, they do this same process again.

MEMO: ADD A *REST* OPTION TO PASS A TURN.

## Damage and Dying

[TK]

## RES, Death, and The Flow

[TK]

# Art Direction

Ideally, I'd like to go for a pencil and ink look, with colors used in the backgrounds more than anywhere else. Sanguine tones. 2D. However, the graphical element is not the most important element of this project, so if basic 3D prims need to take the place of more complex assets, that will be the case.

The gallery containing Diurnal Code sketches and hand-noted designs can be found [here](http://retl.deviantart.com/gallery/46088230): <http://retl.deviantart.com/gallery/46088230>

[Link to Image Document](https://docs.google.com/a/columbusstate.edu/document/d/1Gyk4p6TvYlgLOVmZOku-lA9M914Uv7Sqos6r228cpU8/edit?usp=sharing): Most of my handwritten notes and concept art from the start of the project.

# User Interface

Onscreen buttons. Lots and lots of onscreen buttons.

# Dialogue

**References**

Soul Nomad - [Dragon's Eye](http://www.youtube.com/watch?v=dY4_eJn5dbE)

# Change Log

1 Oct 2013 5PM - 2 Oct 2013 1AM: Working on the first draft of the more formalized design document in an attempt to centralize the information from the looseleaf concepting and the summarized info submitted into weekly reports.

23 Nov. 2013 11:39 PM - 12:22 PM : Created a new document which is to serve as a roadmap to the reduced-content version of Diurnal Code with respect to the remaining available time to complete the project. It includes more specifics on scoring, level setups, behaviors, and gameplay, but a lot of the intended gameplay elements have been removed for simplicity.