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DESIGN DOCUMENT
VERSION 0.5
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VERSION HISTORY

Version 0.1 – April 25, 2016

Version 0.2 - May 1, 2016

Version 0.3 - May 11, 2016

Version 0.4 - May 18, 2016

Version 0.5 - May 26, 2016

GAME OVERVIEW

Game logline

Tactical turn based RPG with character customization via card collection.

Gameplay synopsis

Terminal Tactics is a game where the user controls several characters at the same time to eliminate (disconnect) the enemies from the level. The user can customize their characters class, normal attack, special attack, and passive ability via cards that they collect through playing the game. The user and the opponent can move one character per turn, and the order that the characters take their turn is determined by the user. Characters can move, attack, or wait during their turn.

GAME DETAILS

Description

Terminal Tactics is a game where the user controls several characters at the same time to eliminate (disconnect) the enemies from the level. The player can customize their characters' class, normal attack, special attack, and passive ability via cards that they collect through playing the game. The visual style of the game is reminiscent of Tron -- very clean, and with a very simple color scheme.

Game genre?

Turn based strategy

Is this single-player or multiplayer game?

Singleplayer

Is this 2D or 3D?

2D

Where does the game take place? (world)

A virtual world similar to Tron

What do I control? How many characters?

Control three characters (one per turn). You control where each character moves and attacks during their turn.

What is the main focus?

The main focus of the game is to eliminate all the enemies (rogue AI, viruses, etc) from the level and to collect cards to improve your characters.

How long the game lasts? Or how long game matches last?

We imagine that each level will take roughly 10–15 minutes per level, including team customization.

Comparison

Final Fantasy Tactics -

- Similar movement, but with vertical element (isometric game)
- Different character customization
- One character per turn movement
- Isometric game

Fire Emblem -

- Similar movement and attack mechanics
- Different character customization
- All characters move during one turn

Banner Saga -

- Similar movement and attack mechanics
- Different character customization

- One character per turn movement

What is unique?

No other tactical turn-based strategy game in the same style uses cards for customization.

Why create this game?

We are creating this game because we find the concept of developing a tactical turn based strategy game very interesting and the technical challenges will help us learn a lot about game development. We like the concept of customizing via cards -- it's very streamlined.

AUDIENCE, PLATFORM, AND MARKETING

Target Audience

Fans of tactical, turn based "combat" in games

CSS students/People who will get the references in the game

People who enjoy collecting

Platform

[Give 3 reasons why people would buy this game.]

Tactical turn based combat (Strategy)

Collecting and Customizing characters (Achievement)

Random level layout (Replayability)

Top Performers

- Fire Emblem
- Final Fantasy Tactics

Feature comparison

The game has movement and combat mechanics similar to other tactical turn based strategy games. We hope to differentiate our game from the others with our card collection based character customization. The collectible cards will introduce highly varied abilities for the characters, allowing for an extra element of strategy and achievement for the player.

FEATURE SET

General features

~~Player controller movement~~ Player pathing/Enemy pathing

Tactical turned based combat

Character customization

Card collecting

Gameplay

Gameplay will consist of three main features:

- Tactical turn-based combat / strategy
- Card-based collection
- Character customization through collected cards

THE GAME WORLD

Overview

Travel

The user can explore the level by panning the camera, as they are the "commander" of their own unit. The units themselves can travel a set number of tiles per turn.

Scale

Small scale world, where each level is larger than the width of the camera so that the user can pan around the level.

Objects

Player controlled characters

Enemy characters

Cards

Level obstacles

CAMERA

Overview

The camera will be focused on the game board, however the camera will not be able to cover the entire board at one time. The user will be able to pan the camera over the rest of the board by moving the mouse to the edges of the screen.

GAME CHARACTERS

Overview

Characters and enemies are made up of up to four cards. These cards are their character card, their attack card, their special card, and their passive card. The player's character's cards can be changed from the character customization window. An individual enemies' cards will not change.

Character customization

Stats

- **Attack:** Represents the base level value when carrying out a standard attack. Modified by a virtual "dice roll" at the time of the attack.
- **Defense:** Value that determines how much damage an incoming attack will be reduced by
- **SPC:** A point pool for carrying out special abilities.
- **Move:** The number of tiles a character can move per turn
- **HP:** Hit points, the amount of damage a character can be hit by before logging off

Cards

~~The first card is the card that defines the player and their various stats. This card will lead to the appearance of the character in battle. Changing to a different character card can allow a character to have greater attack or more movement, tailored to a player's playstyle.~~

~~The second card defines what the characters main attack will do and how much damage it does. Each attack card has a picture on it to add a visualization to the item in question. However, this picture will not appear in battle.~~

~~The third card is the character's special card. A special ability can be any range of things, from an area attack to a healing skill. Special abilities will cost 'Special Points' for a character to use. This is to prevent a player from using a character's their special attack on every turn without abandon, forcing the player to consider the best time to use their character's skills.~~

~~The fourth card is the character's passive card that is always active. Passive skills can give bonuses to the character that uses them, or characters around them. This passive can be anything from a simple stat increase, to an always active debuff to enemies on the map.~~

- First card: Character card. Defines character appearance, class, and stats.
- Second card: Defines the character's main attack, and how much damage it does.
- Third card: Special ability card. Could be a range of things, including area attacks or support/healing skills. Will cost "special points" to use so that player can't use it on every turn.
- Fourth card: Passive card. Grants the character a bonus that is always active. Could be a stat increase, or a debuff on the enemy team.

Enemies and monsters

Each enemy has a particular 'character card'. This determines the enemy's look and stats. Two enemies with the same character card will have the same stats, image, skills, and enemy name.

An enemy will have a basic attack. The basic attack has a damage and range associated with it, similar to character's attack card.

Enemies have special skills as well. These function the same as a character's special skills. Enemies will also have 'Special Points', so that an enemy does not overwhelm a character with high-damage attacks.

Some enemies (not all) can have a passive skill that functions the same as a character's passive card.

Skills that enemies have are not necessarily accessible by players in the form of character cards. Moreover, many character cards' abilities will not be use by enemies either.

Enemies may have distinctive behaviors. ~~One enemy type may go straight for an opposing player, whereas another may try and group up with an allied AI and go from there.~~ Behaviors are as follows:

- Enemy goes straight for a specific player character
- Enemy patrols within a certain area until player character gets close
- Enemy waits
- Enemy first goes to allied enemy and then they both move to a player character (Grouping)

USER INTERFACE

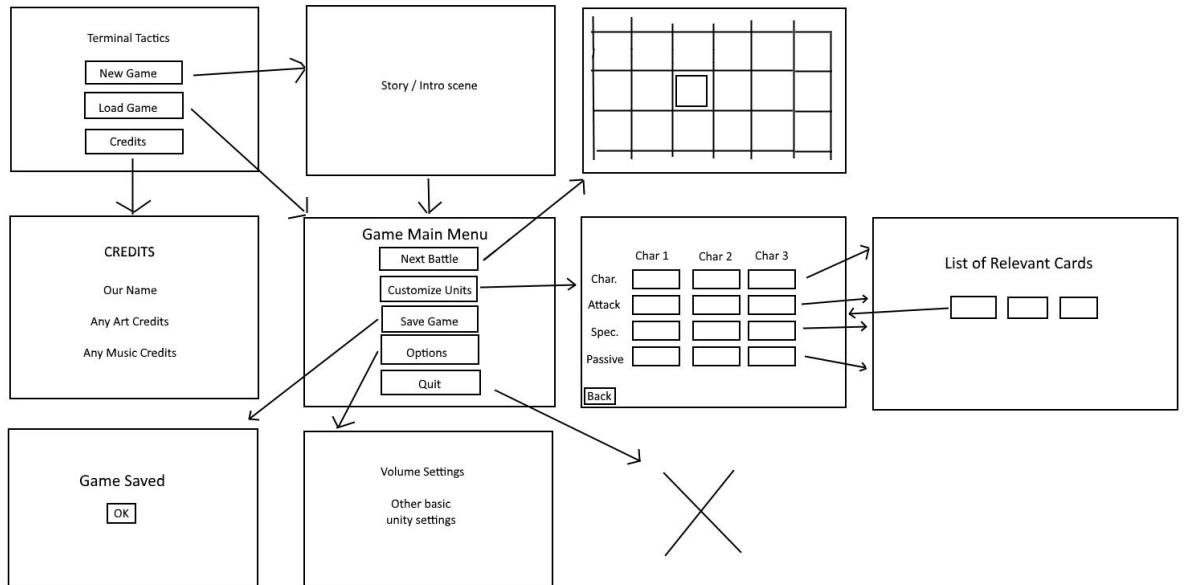
Overview

The user interface is made up of the main menu, character customization menus, save/load menu, settings menu, credits screen, and battle user interface.

The battle user interface will have three major components:

- Battle menu
- Character display
- Movement and range indicator

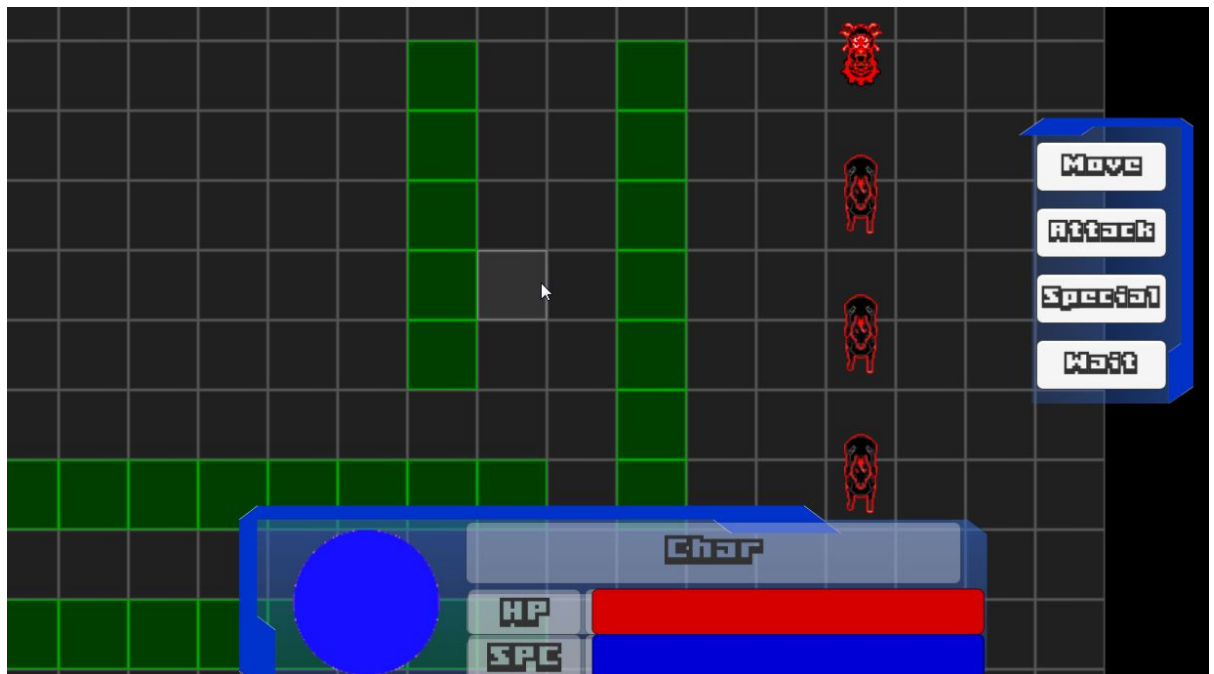
Details









John Von Neumann
ATK: 4
DEF: 3
SPC: 3/5
MV: 4



The battle user interface's battle menu shows the player which actions can be taken by a particular character on that character's turn. This includes their movement action, attack option, and special skill option. The menu will also include an option for the player to end the character's turn. These options will be present in a simple menu that is easily understood by the player, with each option listed vertically.

The battle user interface's character display will indicate the relevant statistics of the highlighted character. This includes the character's name, their current health, and their special points left.

 <p>John von Neumann ATK: 4 DEF: 3 SPC: 5 MV: 4</p>	<p>Self Modifying SP: 2</p> <p>Heal self for 15 HP</p>
 <p>Thread Deals 12 DMG over 3 turns</p>	<p>Garbage Collection</p> <p>Debuffs last for 1 less turn</p>

<p>White hat</p>  <p>HP: 9 ATK: 2 DEF: 2 SPC: 8 MOV: 3</p> <p>Support</p>	<p>Brute force</p>  <p>HP: 5 ATK: 8 DEF: 2 SPC: 1 MOV: 3</p> <p>Attacker</p>	<p>Firewall</p>  <p>HP: 12 ATK: 2 DEF: 7 SPC: 2 MOV: 2</p> <p>Tank</p>
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OBJECTS

Card Deck

Weapons

~~Weapons will be in the form of attack and special attack cards. These cards will represent virtual attacks, such as viruses, brute force attacks, or even blue screen of death~~

Items/Equipment

~~Items and equipment in Terminal Tactics are the cards that the player collects via winning levels or even finding them in the level.~~

Other

Character Cards

Name	Class	ATK	DEF	SPC	M O V E	H P	S P E E D
Linus Torvalds	White Hat Hacker (Support)	2	2	8	3	9	6
Alan Turing	Cryptographer (Tank)	3	8	4	3	14	6
GreedGroup employee	Brute-Force (Attack)	8	2	1	3	5	1
Anitvirus?	Standard Attacker	4	4	4	3	1	5

						0	
Firewall?	Tank	2	7	2	2	1 2	4
Black Hat Hacker? (Or should this be an enemy?)	Bomber/glass cannon	8	1	6	1	8	2

Attack Cards

Name	Damage	Description
Thread	10 damage over 3 turns	Even more dangerous than a needle
Process	4 damage range 2	Like a thread... but bigger
Fork	3 damage that can hit up to two enemies	Even a child process can hit hard
Ctrl+Alt+Del	4 damage to a single enemy	The classic command always has its uses
Code Review	1 damage to all enemies in your range	Always be sure to review your allies code
++	your base damage is increased by 2	Everything looks cooler with ++ in the name

Special Cards

Name	Effect	Cost	Description
Self-modifying	Heal for 5 health	3	Clever code makes people happy
Null Pointer	Stop an enemy from attacking for 1 turn	3	Years of research have turned the Null Pointer into an ally
Blue Screen	Everyone takes 10 damage	8	No one is safe from the blue screen of death
Scheduler	All allies attack first	5	In order to reduce waiting time, priority is introduced
Fire Wall	Creates an impassible wall that lasts 2 turns	3	The best defense is never getting attacked

Passive Cards

Name	Effect	Description
Garbage collection	Remove debuffs	It's always a good idea
Cooling	+1 to attack and defence	Good cooling improves performance
Overclocking	+3 to attack and -1 to defence	For those who like to live dangerously

Priority	+1 to Movement	An increased priority means a faster throughput, for you at least
Compression	Specials cost 2 less	The brand new 385 algorithm means you get more bang for your buck
Dual Channel	Attack can be used for defence, and vice versa	When downloading more ram becomes lame

Enemies

Enemy Name	Stats	Attack card	Special card	Passive card
Worm	ATK - 2 DEF - 1 SPC - 4 MOV - 4 HP - 3 SPEED - 3	Infect: 1 damage	2 SPC - Replicate: Creates a clone of itself that has 0 SPC	Detection evasion +1 movement
Trojan horse	ATK - 2 DEF - 4 SPC - 3 MOV - 3 HP - 6 SPEED - 1	Backdoor: 2 damage, or 4 damage when attacking back	1 SPC - Trick: Reduce movement of units in a radius for 1 turn	Fake antivirus: +1 defense
RansomWare	ATK - 6 DEF - 3 SPC - 4 MOV - 3 HP - 5 SPEED - 5	Encrypt: 6 damage	2 SPC - Root-Kit: Reduce movement of a single unit to 0 for 1 turn	For-Profit: +1 attack
BloatWare	ATK - 1 DEF - 5 SPC - 2 MOV - 2 HP - 7 SPEED - 4	Memory Leak: 5 damage	1 SPC - Inefficient: Reduce SPC of units in a radius by 1	Feature Creep: -1 movement

Bug	ATK - 2 DEF - 2 SPC - 1 MOV - 1 HP - 2 SPEED - 8	Refactor: 2 damage	1 SPC - hit all players for 1 damage	Semi-Colon: gain +1 Movement for each player
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Damage Algorithm

~~Hero vs. Enemy Damage (can not be below 1)~~

~~= Floor((Your Attack + Card damage - Card mitigation / Enemy Defence))~~

~~Enemy vs. hero Damage (can not be below 1)~~

~~= Floor((Your Attack + Card damage - Card mitigation - Enemy Defence))~~

((your attack / enemy defence) * Card damage) * (random between 80%-100%)

Examples:

- Anti-virus using fork vs. Bug = $(4 + 3) / 2 = 7 / 2 = 3$
- White-hat using Code Review vs. RansomWare = $(2 + 1) / 3 = 1$
- GreeGroup using Ctrl + Alt + Del vs. Trojan Horse = $(8 + 4) / 4 = 3$
- RansomeWare using encrypt vs. FireWall = $(6 + 6) - 7 = 5$

MUSIC AND SOUNDS EFFECTS

Overview

Details

Music tracks

- Menu theme

- Battle theme

<https://soundcloud.com/thesonicxclash/unite-synchronization-8-bit>

Sound effects

- Movement selection sound
- Movement (walking) sound
- Attack sound customized to attack card
- Impact sound for when player/enemy is "damaged"
- Special attack sound customized to special attack card
- Card selection sound

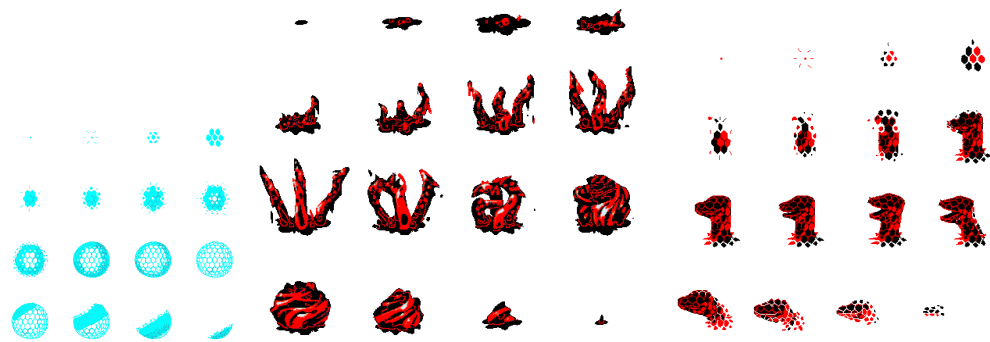
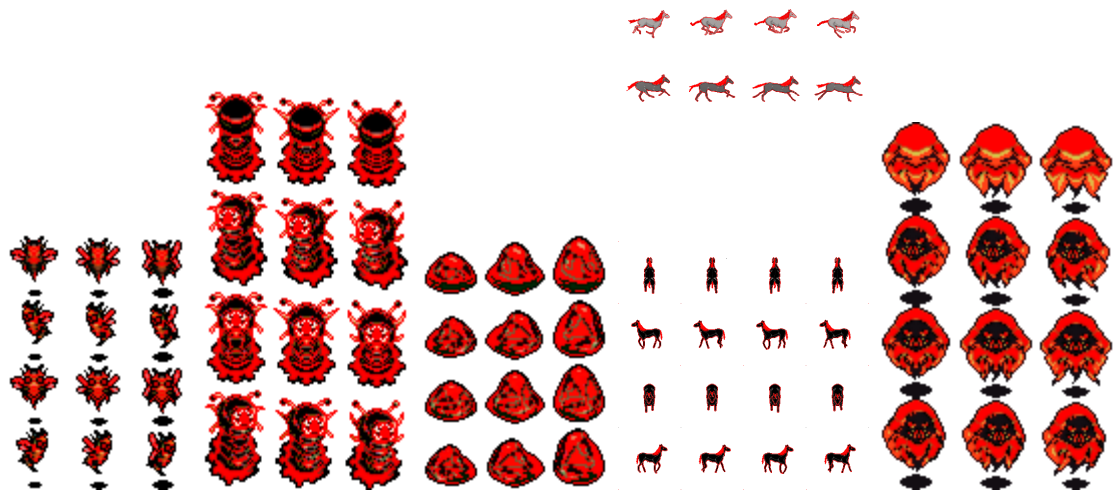
Other

ART

What kind of style will be used in the game?

Very simple, two color style similar to Tron

Blue(cyan) for allies, red for enemies



Needed building models

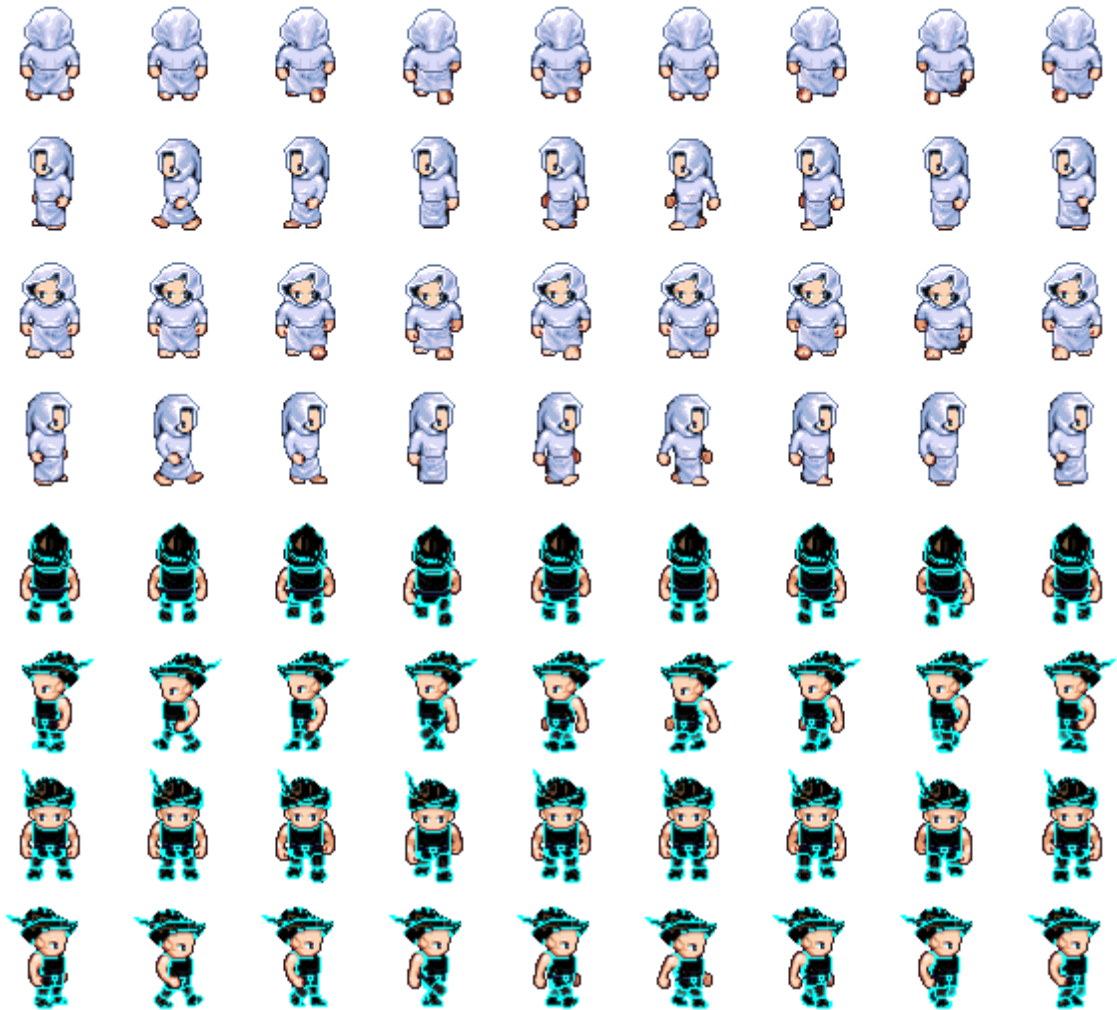
No buildings/minimalist structures

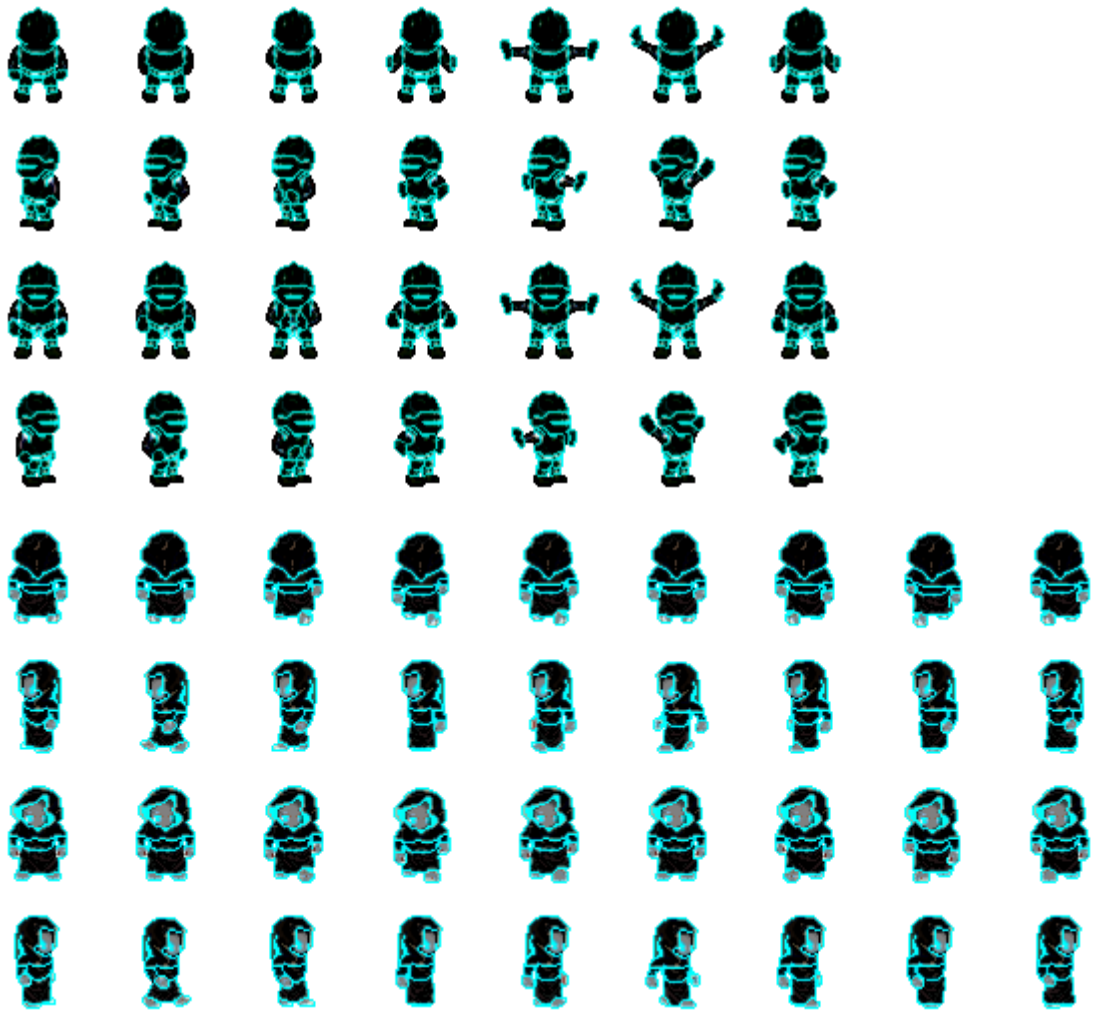
Scenery models

Plain, two-color scheme, simple tiled board (think like a chess board)

Character models

Each of the characters will have its own model





Card models

Vertical Style



Horizontal Style



Particle effects

Using the attack card or special card will have some sort of particle effect associated with it

The damage number will appear and then fade out whenever an enemy or hero does an attack

SINGLE-PLAYER GAME

Overview

The game's intended focus is on the single-player game. All previously mentioned features are intended for the single player game. The player will engage in tactical turn-based combat using customized characters created from collectible cards.

Details

The game will start out with the tile-based game map containing the playable characters as well as the enemies. Each character will occupy a tile on the map, and each team will be grouped together on one side of the map.

When it is your character's turn you can choose to move your character. When you choose to move, the game will highlight the possible tile locations that specific character can move in that turn. In addition to moving, during a character's turn you may use the character's weapon card or special attack card. These will most often target an enemy and do damage to that enemy. When you have completed a character's turn, you select 'end turn'. After this, the game proceeds to the next character's turn, whether it be one of your other characters or one of the enemies.

The game completes when one team has no characters left. If the player has no characters left, it is 'Game Over', and the player must reload a saved game. If there are no enemy characters left, the player has 'won', and will receive a prize for completing the level. After receiving a prize, the game will continue to the menu screen.

At the menu screen, the player can complete three actions. First, they can enter the customize characters screen. Second, they can save/load the game. Third, they can proceed to the next battle.

At the character customize screen, a player is able to manage their characters and cards. A player can view all cards that they have acquired through gameplay. Moreover, a player can switch out a character's cards with cards they have acquired, providing character customization.

Story

The year 2385, the singularity has been all but completed. Nearly every person has had their consciousness uploaded to the world's most powerful supercomputer, the CSS Kelvin. There they live out their lives in complete bliss, fulfilling every desire and granting every wish. But, beneath the beauty lies a sinister band of hackers, the Squares. Their only goal is to destroy the Kelvin, and bring destruction to the world. Their only resistance are the Circles. A group of noble citizens who never upload their minds, and instead dedicate their lives to protecting the minds of mankind. Now it's your time to shine. Join the Circles, customize your squad, lead them to victory, and save the world!

Victory conditions

Defeating all of the enemies on the map will result in completion of a level. Completion of the game will mean that the player has collected all of the cards in the game. The game is designed for replayability, so meeting the victory condition does not necessarily mean the end of the game.

RESOURCES & LINKS

Links to related resources

Design document based on this template:

[HTTP://FORUMS.XNA.COM/FORUMS/T/229.ASPX](http://forums.xna.com/forums/t/229.aspx)

[HTTP://INDIEPATH.COM/PUBLIC/DESIGNDOCUMENTTEMPLATE01.DOC](http://indiepath.com/public/designdocumenttemplate01.doc)

A few sections of the document are based on the design template in this book:

Fullerton, Tracy. Game Design Workshop, 2nd Edition: Elsevier Inc, 2008.

EXTRA MISCELLANEOUS STUFF

Overview

Demo To Do List

- ~~Character Attacking / Character turn menu~~
- ~~Card & Card UI~~
- ~~CharacterInfo in CharacterBehaviour (CharacterBehaviour as "Character" class)~~
- ~~Character customization with cards~~
- ~~Menu / Character customization screens~~

Future To Do List

- ~~Special attacks~~
- Over time behavior ("For 1 round..")
- Camera behavior (pan to character)
- ~~Floating number damage display~~
- Level save/load system
- Character card save/load system
- Improved enemy AI
- Attack effects
- Character art
- Character animation
- Character order menu

Bugs

- Enemy turn occasionally causes game hang
- Buttons do not consume click events
- Character bodies become impassable
- Camera Jitter

Crazy ideas

- Multiplayer 'versus' mode
- Mobile compatibility (eg Android portability)
- Multi-layered levels (eg Vertical element)
- Procedural level generation