Final Descent IV

Report Final of Week 15

By Alex Maestre

12/11/2011

Application Development

Project Concept Proposal

- **Context**

    This project will be the creation of a role-playing game using a pre-existing game development engine. The finished product is intended to be a single-player experience that incorporates elements of both Japanese and Western RPGs as whole, the gameplay being easy to pick up while at the same time engaging. In terms of games made with said development engine, it will be a project that will heavily modify existing game mechanics to provide an experience that cannot be created easily and is thusly unique. *Updated 10/30/11*

- **Goal**

    The goal of this project is to create a light-hearted RPG in which the player is tasked with descending through a dungeon with floors that are different each time the player enters. They are different due to each floor layout being randomly selected from a pre-generated list of maps. Within these floors, there will be chests containing randomized loot, the rarity and usefulness of said loot growing higher in proportion to how deep the player is in the dungeon. This application of depth with power applies to the random troops of monsters wandering the dungeon as well, their strength growing the further down the player explores. This dynamic of uncertainty is in the vein of Western RPGs, namely those of the "roguelike" variety. Battles will commence in a turn-based scene, being

an ode to the Japanese RPG style that so much of the game's presentation draws from. These will be the main aspects of the project. *Updated 10/30/11*

- **Audience**

Any roguelike or RPG fans in general are included in the intended audience. The community based around the game's engine is always eager to share their creations and examine the work of others. This project would make suitable material for a portfolio in game development, giving future employers an example of work that can be achieved.

- **Functionality**

Players will be able to create 4 characters of the archetype of their choice, each class having unique abilities and play styles suited to them. Once finished, the player is placed in a hub town in which he can shop for equipment, rest, and descend to the dungeon. The floors of the dungeon will be chosen at random from a pre-defined list, complete with chests and enemy troops that have random contents, the overall limit of power of monsters and items found within scaling higher as the player reaches greater depths. The game will be completed when the player defeats the final boss found at the bottom of the dungeon. *Updated 10/30/11*

- **Milieu**

Much of the milieu has been elaborated, but to be specific, the influence for this game draws across a wide range of RPGs that I have played. The title is a direct reference to the *Final Fantasy* series, even pointing out its ironic numbering system. The menus and battle system are in the minimalist style of games like those in the *Dragon Quest* and *Mother* series. The reliance on odds and chance in dungeon exploration draws from "roguelike" games, notable ones including *Angband* and the *Diablo* series. The ability to see and avoid enemies that pursue the player can be attributed

to games of the *Lufia* series. This is only to name a few of the countless RPG experiences that have inspired my work. *Updated 10/30/11*

- **Novelty**

This project should create a game that can be completed within but a few hours for an experienced player. Its presentation is intended to inspire a "retro" feel, borrowing both graphical and mechanical inspiration for the elements at play. *Updated 10/30/11*

- **Resources**

    o *RPG Maker VX* - http://www.rpgmakerweb.com/product/rpg-maker-vx

    o *RPG Maker VX Community* - http://www.rpgmakervx.net/

    o *GubiD's Ruby Tutorials* - http://www.youtube.com/user/gubid

    o Probable future resources will include sprites, music, and tile sets from various credited artists

    o Various scripts by RPG Maker VX users, sprites, and songs that have been used or modified, credits to whom are included within the project and its readme.txt

    o Royalty-free font and dragon clip-art in logo:

    Font "8 Bit Limit" from http://www. 1001freefonts.com/

    "Dragon Head Silhouette" from http://www.clker.com/

    Updated 11/20/11

- **Challenges**

The most challenging roadblocks that can be foreseen will be adding the functionalities of a roguelike to the *RPG Maker VX* engine. The inclusion of randomized dungeons will require a great deal of custom scripting within the game engine. A challenge will also arise in the process of populating the engine's database with the various possible enemies and items.

- **Measures**

The measure for the project's success will require various functionalities in order to produce a working demo. These functionalities will include character creation, an inventory system, a shop/inn in which the player can trade goods and rest, proper dungeon generation and population, swappable character equipment, and combat.

- **Future Extensions**

An added functionality would be allowing the player to have multiple companions, possibly controlled by AI. The inclusion of a wilderness outside the town for players to explore could be a future extension as well.

Inspiration

- **Motivation**

I, for one, have always enjoyed playing video games. Of all the types, role-playing games were always my favorite. Naturally, I've always had an itch to try and create my own game of that genre. The choice of an RPG is due to the proper challenge it would pose to both create and play – a challenge suitable for a senior-level project. *Updated 10/30/11*

- **Profession**

My dream is to get into the game development market. This endeavor of creating an RPG would make a strong inclusion to my future portfolio, as well as the fact that its creation involved the use of a pre-existing engine to create something unique. Basically, this project would do nothing but help my chances of staking a claim in the game development industry. *Updated 10/30/11*

Vision and Scope

- **Vision**

   This project shall produce an engaging, single-player RPG experience. Players will combat murderous monsters and hunt for legendary loot while descending to the depths of a dungeon that has a different layout for every playthrough. The custom scripting involved in creating a product like such will provide numerous scripts to the public of the RPG Maker VX community, allowing the work to be used and referenced in the projects of others, its popularity among the community spreading with a ripple effect. In addition, it shall serve as homage to the "old school" RPGs of the 8-bit, 16-bit, and PC systems of the '90s, garnering attention from fans of the genre. Ideally, it should serve as inspiration to any future game designer hopefuls. *Updated 10/30/11*

- **Scope**

   Gameplay will take place in a hub town that contains a shop where players can buy and sell items, an inn where they can rest to restore their strength, and a stairwell that leads to the dungeon. This dungeon will have randomly generated levels that contain enemies and treasure – as the player delves deeper, both the difficulty of encounters and rarity of treasures increase. Monsters will be spawned when a player moves to another floor, wandering throughout the level, attacking the player when in sight. Characters will grow stronger as they gather new equipment and slay monsters, preparing them for their eventual battle with the boss monster at the lowest depth – completion of the game relies on it. Possible additional features may include, but are not limited to: a bank in which players can store their favorite items; varying difficulty settings that provide a deeper dungeon for "hard mode" and a smaller one for "easy"; a wilderness on the exterior of the

town, providing elements of the dungeon in an open environment; additional towns that can be accessed through the wilderness, possibly with their own respective dungeons. *Updated 10/30/11*

Preliminary Software Requirement Specifications

1. Statement: Troops of enemies generated as non-playable character events on map.

   Evaluation Method: Enemies will be viewable as event-based characters in predetermined places on the map.

   Dependency: None

   Priority: High

   Requirement Revision History: Divided task to make *Enemy movement* a separate requirement; further detail.

   Updated 9/25/11

2. Statement: Enemy events will wander towards player at a 1:1 rate with player movement; some enemies may be faster.

   Evaluation Method: Enemies can successfully move randomly about the map and move towards the player when within range; enemies don't get stuck in corners.

   Dependency: (1) Enemy Generation

   Priority: High

   Requirement Revision History: Statement added by dividing previous statement (1); further detail.

   Updated 9/25/11

3. Statement: Use in-engine management system to assign and add objects to the database for combat statistics of player, enemies, items, and skills.

   Evaluation Method: Damage and performance within combat are influenced by player and enemy stats (Will require statement (4)); Items and equipment are added in the database; Skills are added in the database.

   Dependency: (1) Enemy Generation, (2) Enemy Movement, (4) Custom Battle System

   Priority: High

   Requirement Revision History: Statement added in case engine is incapable of providing statistic management for combat engine; it is surely capable through inheritance, so in-engine database is the statement and should only require populating it with values.

   Updated 9/25/11

4. Statement: Custom Battle System Implemented

   Evaluation Method: Made a functioning modification to the in-engine battle system making it visually unique.

   Dependency: (1) Enemy generation, (2) Enemy movement, (3) Player and Enemy Statistics

   Priority: High

   Requirement Revision History: Updated dependencies; idea to make a modification to the battle engine further detail, reduced scope.

   Updated 9/25/11

5. Statement: Create a stairwell event that chooses one of five different pre-made maps at random as the next dungeon level below when a player descends it. This is essentially the dungeon entrance.

   Evaluation Method: Player can descend into the dungeon and find different floors each time he

goes down; the floors shall remain the same throughout a single play-through; this function can be used for every dungeon depth.

Dependency: None

Priority: High

Requirement Revision History: Specified process of dungeon generation in further detail.

Updated 9/25/11

6. Statement: Create treasure chest events that will have contents chosen from a pre-defined list at random.

    Evaluation Method: Player can find treasure chests containing random items that have strength and rarity relative to the player's current depth.

    Dependency: (5) Dungeon Generation

    Priority: High

    Requirement Revision History: Updated dependencies; further detail.

    Updated 9/25/11

7. Statement: Enemy and treasure events placed on dungeon maps.

    Evaluation Method: Player can encounter enemies and treasures within the dungeon floors.

    Dependency: (1) Enemy Generation, (2) Enemy Movement, (5) Dungeon Generation, (6) Treasure Randomization

    Priority: High

    Requirement Revision History: Updated dependencies and modified statement.

    Updated 9/25/11

8. Statement: Create hub town.

    Evaluation Method: Player has access to a store where items can be traded and an inn where his
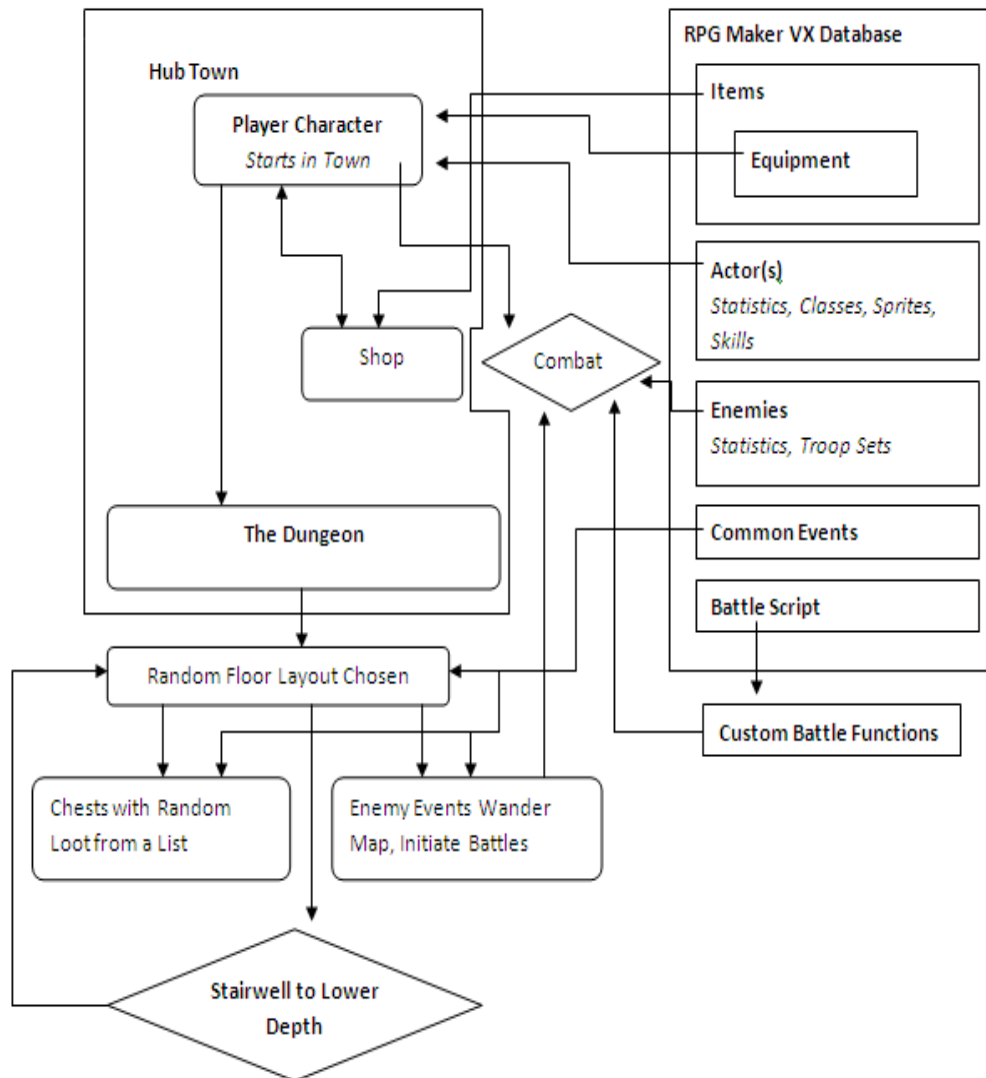
health can be restored for a fee.

Dependency: (3) Items in Database

Priority: High

Requirement Revision History: Modified statement.

Updated 9/25/11

System Design and Architecture

Implementation

Included Files:

- **README.txt**

- **Alpha.exe**

  Alpha.exe is a self-extracting file that will place its contents in a designated folder. The files included are **Game.exe**, the game itself in an executable format; **Game.rvproj**, the *RPG Maker VX* project file upon which Game.exe relies; **Game.ini**, a configuration settings file for the project; various folders containing the game's user graphics, audio, and system data; also included is the *RPG Maker VX* **Run-Time Package**, containing the default graphics, audio, and .dll files used when creating a game.

About the Author

  Richard "Alex" Maestre, *Lead Developer -*

  Alex Maestre is the head of the *@venture* project, choosing to develop such a title to fulfill the Capstone requirement for Berea College's Computer Science degree. Alex only began coding in 2010, starting with C++. However, he has had plenty of experience with video games since he first picked up a controller as a youth, growing a particular passion for the "RPG" genre. The idea to build a role-playing game for a project came naturally, the *RPG Maker VX* engine serving as an appropriate foundation to test his coding practices.

Known Bugs & Issues – *Final Descent IV* (V1.0)

- With "Gained Item Shop", sometimes duplicates of an item appear on the list

    Updated 12/11/11

Preliminary Test Plan

My basic testing plan is to first create parties containing one of each character type to make sure that all of their battle abilities work as intended. My next phase would be to use all the event methods placed on my maps to ensure their functioning. The next thing left would be to play through the game, from beginning to end, multiple times, to ensure that it can be done. In the meantime, I perhaps will send beta copies to friends willing to test so that they might provide me with bug reports.

Test Case 1: "Actor Class Functions"

Testing - Tests functioning of skills and archetype-specific abilities in battle to ensure they work as intended.

Preconditions – 1) have actor of testing class in group, 2) in battle or out of battle

Steps – 1) use all skills character can learn in battle, if allowed, 2) use all skills characters can learn out of battle

Desired Results – If an ability does not function correctly, it should be apparent and a measure can be taken to fix the problem.

Tested and functioning correctly as of 11/7/11

Test Case 2: "Test Town and Map Functions"

Testing - Tests functioning of event methods called on the map, like the shop, inn, characters, enemies, transports, and treasure. Testing of dungeon methods may fall partly in **Test Case 3.**

Preconditions – 1) have created a party (part of test, technically), 2) on appropriate map to test method

Steps – 1) access all methods in game to ensure they function as intended, 2) attempt such with

different starting characters, 3) check in-game variable menu to ensure variables are controlled

correctly by methods

Desired Results – If a method does not function correctly, it should be apparent and a measure

can be taken to fix the problem.

Tested and functioning with minor issues as of 11/7/11

Test Case 3: "Playability"

Testing - Tests if a player can even finish a game while still accessing all content available.

Preconditions – 1) have created a party of characters

Steps – 1) play through the entire game, 2) while playing through game, access event-methods

made available on the map and apply the benefits (if any) they grant to the experience, 3)

repeat multiple times with multiple parties, if possible

Desired Results – If an impassable section of the game is encountered, whether by design or

difficulty, it should be obvious and can be fixed within the editor.

Tested and functioning as of 11/20/11

Test Case 4: "Beta Testing Team"

Testing – Essentially allowing others to give input as they apply **Test Case 3** themselves.

Preconditions – 1) **Test Case 3** has been completed, 2) bugs realized in previous test cases have

been fixed, 3) create a document that briefs subjects on the beta and provides a response

template

Steps – 1) send out beta versions with documentation to testing subjects, 2) wait for replies, 3)

apply data from responses to fixing issues

Desired Results – Participating subjects provide thoughtful, informative bug reports as well as

overall constructive criticism.

Two participants have played and completed game multiple times as of 12/11/11

Unit Test Case 1: "Character Creation"

<u>Testing</u> – Checking the functionality of character creation at the game's beginning.

<u>Preconditions</u> – None

<u>Steps</u> – 1) Start a new game, 2) Create characters as instructed

<u>Desired Results</u> – Can create a party of 4 of the archetypes I choose. Any bugs should be apparent.

Tested and functioning correctly as of 11/7/11

Unit Test Case 2: "Gained Item Shop"

<u>Testing</u> – Checking the functionality of the shop that contains only items the player has encountered.

<u>Preconditions</u> – 1) Have found items, 2) Have found multiple copies of the same item

<u>Steps</u> – 1) Gather items, 2) Use shop

<u>Desired Results</u> – Items acquired will appear in the shop inventory. Duplicates, though not intended, may occur.

Tested and functioning with minor issues as of 11/7/11

Unit Test Case 3: "Random Chest Contents"

<u>Testing</u> – Checking the functionality of the chests within dungeons that have random loot that grow stronger with player depth.

<u>Preconditions</u> – 1) Have entered dungeon

<u>Steps</u> – 1) Open chest, 2) Check inventory, 3) Repeat

<u>Desired Results</u> – An item within a particular given range of possibilities will be acquired from

the chests.

Tested and functioning correctly as of 11/7/11

Unit Test Case 4: "Enemy Movement"

<u>Testing</u> – Checking the functionality of the enemy event movement across the map.

<u>Preconditions</u> – 1) Have entered dungeon

<u>Steps</u> – 1) Find an enemy, 2) Attempt different manners of approaching it, retreating from it,

and other types of random movements, 3) Engage in battle with the enemy

<u>Desired Results</u> – An enemy will move generally towards the player, initiating combat when in

an adjacent tile.

Tested and functioning correctly as of 12/11/11

Unit Test Case 5: "Enemy Troop Scaling"

<u>Testing</u> – Checking the functionality of the enemy troops encountered growing stronger with the

player's depth in the dungeon..

<u>Preconditions</u> – 1) Have entered dungeon

<u>Steps</u> – 1) Find an enemy, 2) Engage in battle with the enemy, 3) Repeat at different dungeon

depths

<u>Desired Results</u> – An enemy troop within a particular given range of possibilities will be

encountered in battle, the range shifting with the player's dungeon depth.

Tested and functioning correctly as of 11/7/11

Unit Test Case 6: "Thief's Steal Command"

<u>Testing</u> – Checking the functionality of the thief class being able to steal an item from an enemy,

a given list of values determining the item possibilities for the specific enemy.

<u>Preconditions</u> – 1) Have formed a party containing a thief, 2) Engaged in battle

Steps – 1) Perform a "Steal" command until an item is acquired, 2) Repeat with every enemy encountered

Desired Results – An item will be added to the inventory depending on how the "Steal" resulted. All attempts to "Steal" from an enemy that has already been stolen from will fail.

Tested and functioning correctly as of 11/7/11

Integration Test Case 1: "Random Chests + Steal Command -> Gained Item Shop"

Testing – Checking the functionality of the methods that give the player items with the Gained Item Shop script that lets players purchase said items.

Preconditions – 1) Have formed a party containing a thief, 2) Entered the dungeon

Steps – 1) Acquire items from chests, 2) Steal items from enemies in battle, 3) Acquire multiple copies of these items, 4) Check shop contents

Desired Results – All items acquired in the above manners should appear in the inventory of the Gained Item Shop.

Tested and functioning with minor issues as of 11/7/11

Software Demo

- http://youtu.be/c7IqqIPObR8

  Video shows how a player can begin a new game and create characters. It then describes the basics of how dungeon-crawling works, the premise of battling enemies, how the "gained item shop" functions, as well as a few other tidbits that beginners may find interesting.

Executive Section

To: Dr. Jan Pearce

From: Richard A. Maestre

Subject: @-venture

Date: September 4, 2011

- **Accomplishments**

This week I decided on using a pre-existing game engine as the framework for all the
functionality of my roguelike. After examining the source code for various roguelikes created by
others, it became apparent that building a game of such complex algorithms from scratch could
require far more time than is affordable. The rest of my time spent on the project was focused on
learning the GUI of *RPG Maker VX*.

- **Challenges**

Implementing my own roguelike in C++ was the most glaring challenge I had to deal with. After
deciding that it may be best to employ game development software, I'm left with the challenge of
understanding its GUI and its own scripting language.

- **Time Spent**

3 hours on Wednesday afternoon examining roguelike source codes; 2 hours on Wednesday
night attempting to implement my own grid-based movement in C++; 2 hours on Friday night
researching RPG development suites; 3 hours on Saturday afternoon playing around with/learning

the *RPG Maker VX* interface.

Total time: 10 hours

- **Goals**

By next week I plan to fully understand how to use *RPG Maker VX* and its script editor. With it, I

hope to be able to at least implement enemy characters and their movement patterns/lines of sight.

To: Dr. Jan Pearce

From: Richard A. Maestre

Subject: @-venture

Date: September 11, 2011

- **Accomplishments**

This week was spent mostly watching YouTube tutorials on Ruby scripting within RPG Maker VX.

These tutorials covered mostly the basics, such as the use of classes, subclasses, and aliases. I have

made the investment of $59.99 to purchase a key for RPG Maker VX. Also this week I spent some

time perusing the boards of the RPG Maker VX community, finding many user-made scripts that

contained functions I wish to implement. They provide excellent examples.

- **Challenges**

After looking at some user-made scripts, a challenge is foreseen arising in implementing enemy

movement. Having creatures track down the player will require a fair bit of scripting. Also,

implementing map generation without misplacing staircases, enemies, and treasures in unreachable places will be a hurdle.

- **Time Spent**

3 hours between Tuesday, Wednesday, and Saturday watching YouTube tutorials on Ruby; 2.5 hours looking at user-made scripts and playing demos using said scripts.

Total Time: 15.5 hours

- **Goals**

I plan to finish up on these tutorials if there aren't too many more, using what I learned to start modifying the in-game script. The user-made scripts I've looked at will be examined further, for when I begin to understand their logic, I can begin to implement similar systems.

To: Dr. Jan Pearce

From: Richard A. Maestre

Subject: @venture

Date: September 18, 2011

- **Accomplishments**

I continued with watching Youtube tutorials, now using some concepts to modify scripts from the RPG Maker VX community. Also, I began to work on hand-drawing a logo, but I ended up making

one using an ASCII font as the act of designing a logo physically will take some more effort and planning.

- **Challenges**

Modifying scripts to create something even slightly different is proving to be hit-and-miss so far, proving my Ruby knowledge to not be much further than trial and error – coding is becoming easier with each attempt, however. In addition, the final design for my logo is something that I just can't decide on right now. Surely it will come with time.

- **Time Spent**

3 hours between Wednesday and Friday modifying scripts, 2 hours Saturday designing drawn logo, 2 hours Sunday generating ASCII logo.

Total Time: 22.5 hours

- **Goals**

I hope to actually get a good start on my project – once I have a basic framework established for my game, I can begin to evaluate the amount of work needed for each software requirement.

To: Dr. Jan Pearce

From: Richard A. Maestre

Subject: @venture

Date: September 25, 2011

- **Accomplishments**

  During this past week I came to understand more about RPG Maker VX than I thought I would. I learned about a second type of scripting included in the engine – event-based scripting. With the use of a database of variables and switches included, many more things like the generation of dungeon levels and random chest contents seem that much more doable. I succeeded in creating event-based enemy encounters, enabling their ability to walk towards the player.

- **Challenges**

  The next big hurdle I see myself struggling to do would be figuring out how to actually randomize the variables in the database. Without some sort of random number generation, I won't be able to have that same random effect in the branch choices for stairwells and chests.

- **Time Spent**

  3 hours between Wednesday night, Thursday afternoon, and Saturday afternoon "eventing" enemy movement, 4 hours between Wednesday night, Saturday afternoon, and Sunday afternoon researching events and RPG Maker VX resources
  Total Time: 29.5 hours

- **Goals**

I need to get random variables implemented before I can have any of my basic dungeon-based functions working. Once I have that, I'll have everything I need to have a basic RPG framework established – I would be able to build all the rest of my requirements off of that.

To: Dr. Jan Pearce

From: Richard A. Maestre

Subject: @venture

Date: October 2, 2011

- **Accomplishments**

This week I managed to get a basic demo put together, though not particularly with any custom scripts implemented as of yet. However, I've made a pretty good layout for the placement of all the instances which will be calling my scripts, so it truly is some immense progress. Also, much of the intended functionalities of the game are implemented through the RGSS(Ruby) modules.

- **Challenges**

Creating the basic maps and populating them with instances was a time-consuming process, the RGSS implementations requiring a fair bit of testing and error-hunting. While that was difficult, the

truly challenging part of this past week was finding time for project development in a needlessly

hectic schedule!

- **Time Spent**

10 hours between Saturday afternoon and Sunday night readying demo file (creating maps,

object instances), 3 hours Saturday night writing out and attempting to troubleshoot scripts

Total Time: 42.5

- **Goals**

Now that I have some maps and object instances established in my database, I hope to get some

scripts working. I have a fair amount of the project's intended functionalities being emulated by the

instances, so I just need to replace those functions with script calls. So, more or less, I'll be

troubleshooting like crazy.

To: Dr. Jan Pearce

From: Richard A. Maestre

Subject: @venture

Date: October 16, 2011

- **Accomplishments**

Leaps and bounds have been made in the past two weeks, leading to the actual implementation

of some custom scripts. I managed to create a script to randomize the contents of chests, the range

of obtainable items increasing with proportion to the player's depth below the surface. Also, a script for a "stocks only items you have found" shop has been implemented as well, replacing the old shop. Enemy movement was tweaked to follow the player better with the implementation of a script I found in an RPGVX community forum, my credit to the author included in the code (shouldn't go reinventing the wheel just yet). In addition to all this, I made countless database changes, extended the depth of the dungeon, wrestled with difficulty-balancing issues, and even threw in a boss fight on a specific dungeon level.

- **Challenges**

Troubleshooting my script implementations and finding appropriate help online, whether it is through a tutorial or reading the code of public scripts line-by-line. While my total lines of code written wasn't necessarily enormous, the amount of time that was spent researching and trying to understand the logic required proved quite contrary.

- **Time Spent**

18 hours between the 6th, 8th, 9th, 10th, 11th, 14th, 15th, and 16th researching and implementing my scripts, 6 hours between the 8th, 9th, 14th, and 16th changing things like items and monsters within the database, 3 hours on the 15th building new maps and modifying existing ones
Total Time: 69.5 hours

- **Goals**

Now that my scripts are steadily filling in the framework for my game, I have a good pace going – my main goal is to continue adding to that library of scripts. The task I am hoping to perform as soon as possible is implement a script to control the difficulty of enemies encountered by a mixture

of random chance and the player's dungeon depth - Lord knows I've been trying to get that ordeal off my plate.

To: Dr. Jan Pearce

From: Richard A. Maestre

Subject: @venture

Date: October 23, 2011

- **Accomplishments**

The past week has proven to be a time of progress, allowing me the chance to fulfill the goal I put toward myself and then some. My goal was to have enemy encounters that scaled in difficulty with the dungeon floor's depth – I implemented this in a rather intuitive manner through the use of variable control in events. It was a relatively easy method that was hiding right under my nose! In addition to achieving that goal, I also implemented a character selection system so players can have more control over their party dynamics (plus the ability to select the gender of characters). On top of that, I spent a good while designing enough floors to double the reachable depth of my dungeon.

- **Challenges**

While the challenge of scaling enemy difficulty was tasking in how long it took to see an obvious solution, the greatest time sink this last week was setting up a character selection process. It required filling out the database with 4 different versions of the same 8 character archetypes

(Warrior, Wizard, etc.), each of those needing 2 versions to represent male and female. This, in turn, meant I needed to make branching conditionals and cases to handle all the possible variants. The whole process gave me a bit of psychosis by the end, but I couldn't be happier with the results!

- **Time Spent**

3 hours between Wednesday and Friday nights researching and implementing my enemy difficulty control, 4 hours throughout Saturday implementing my character selection system, 2.5 hours on Sunday building new maps and modifying existing ones

Total Time: 79 hours

- **Goals**

I suppose that the next task I should set my sights on is giving the battle system an overhaul in some way, shape, or manner. CBS (Custom Battle Scripts) are abundant in RPG Maker communities, so my research is cut out for me. I know for sure that I'll have to script a "Steal" command specifically for Thief characters, as the default system has no included functionality for such a RPG staple. Also, I suppose I ought to start thinking up a new title and logo while I'm at it.

To: Dr. Jan Pearce

From: Richard A. Maestre

Subject: Final Descent IV

Date: October 30, 2011

- **Accomplishments**

My most apparent accomplishment this week would probably be the changing of my project's

title and logo, both of which I feel fit the vision of my project – an ode to the "old school" RPGs.

More notable, however, are the scripts that have been implemented. A few community scripts have

been used and modified (battle system, level up window, modified status screen), while I managed

to write in a script for a "steal" command for the thief, thanks to a tutorial. I added additional

functionality to the script to allow thieves to steal weapons and armor, as it originally only dealt with

items, a different object itself.

- **Challenges**

Working the factor of weapons and armor into the steal script used a big portion of my time.

Also, researching, implementing, and modifying things like the battle system and status screen took

a good while.

- **Time Spent**

3 hours between Monday and Friday night looking up musical resources, finding a program that

converts MIDI files into a chiptune representation (haven't done anything with that yet, hope to), 10

hours all day Saturday, researching, demo-playing, implementing, and modifying the public scripts I have added in, 5 hours Sunday implementing the steal script and adding weapon/armor functionality.

- **Goals**

I might as well go for trying to add in custom, selectable battle commands for each class (Paladin defends teammates, Magician can focus for a spell, etc.) that is in the same list as Attack, Item, and what-not. I also want to use that "chiptune-ing" program to remix the soundtrack of the engine – I feel that a big part in drawing a player into an RPG is through music. The 8-bit style sounds are sure to strike a chord of nostalgia.

To: Dr. Jan Pearce

From: Richard A. Maestre

Subject: Final Descent IV

Date: November 7, 2011

- **Accomplishments**

This week I managed to make some heavy aesthetic overhauls to my project. The most apparent

is that much of the music is in a chiptune presentation, the music altered in this fashion including

some of RPGVX's default songs as well as a few tunes ripped from classic RPGs. Also changed were

the enemy battler sprites, being changed to rips from *Lufia II*. All of these sprite rips came in an

extremely small resolution, so I had to edit their size in some manner – because blowing up

hundreds of images sounded less than appealing, I wrote a script that blows up the enemy sprites

when displayed in battle. Also, I decided to use a different pre-made script for enemy movement, as

the author of the original one wished for his work to not be used without explicit permission, which I

respect.

- **Challenges**

Creating the new soundtrack for my game required a long process that took a good while to

figure out. I would first find a MIDI file, load the file into *GXSCC* to "chiptune-ify" it, export as a WAV

file, load the new WAV into *Audacity*, remove any silence and musical segments that would

interrupt seamless looping of the track, export the music as an OGG file to reduce necessary size,

and then finally import it into *RPGVX.* This had to be done with *every* music file I wanted to change.

- **Time Spent**

2 hours Monday night spent finding a new enemy movement script and implementing it, 4 hours between Monday, Tuesday, and Thursday nights searching for proper MIDI files to use in my RPG, 5 hours Saturday afternoon used transcribing and editing audio tracks, 4 hours Sunday afternoon finding, importing, and designing a script for *Lufia II* enemy sprite rips.

Total Time: 112 hours

- **Goals**

I'm hoping that my aesthetic overhaul is not yet over, as I still require a few more aspects for the project to fit within the "old school" RPG theme it so strives for. I hope to implement some map spritesets that fit within an 8-bit or 16-bit coloring scheme, as well as tilesets in that same manner. Also, my library of sound effects could use the same treatment, though I may have to replace them altogether. There are a few bugs with some of my scripts that I hope can be ironed out (namely the "Gained Item Shop" and "Enemy Movement"). Fortunately, they don't come close to ruining the game or anything – they just make you go "Huh, that's weird."

To: Dr. Jan Pearce

From: Richard A. Maestre

Subject: Final Descent IV

Date: November 13, 2011

- **Accomplishments**

   I spent most of my time this week looking for 8-bit and 16-bit sprite resources to change the visual aspects of the maps, which I succeeded in partly. I have at least been able to change almost all of the environments with a tile set from the Dragon Warrior games. In addition, I got deep into testing the program, attempting an entire play-through to the bottom of the dungeon so far – I'm five floors from the end, and so far things have worked as intended.

- **Challenges**

   Testing is taking longer than expected – while there haven't been any bugs to the experience, I identified many balancing and difficulty issues during my time playing. I'll immediately save my progress and go make a fix to it before progressing. This usually involves changing the statistics of an enemy, or changing the cost of a skill. I have to make sure the game isn't a cakewalk, after all.

- **Time Spent**

5 hours between Monday and Wednesday night spent searching for 8-bit sprite resources, 2 hours Friday night redrawing tiles onto maps, 4 hours between Saturday and Sunday night performing a

full playthrough and attending to playability issues.

Total Time: 123 hours

- **Goals**

The last artistic change I should need would be to the actual character sprites, which has proven to be a hard resource to track down, considering I need an 8-bit style or something of the like. I may have to spend some time making my own sprite sheets out of individual samples. I also want to get my beta testing team started up next week, as the sooner I can get fresh input, the better.

To: Dr. Jan Pearce

From: Richard A. Maestre

Subject: Final Descent IV

Date: November 20, 2011

- **Accomplishments**

Testing, testing, testing… I managed to finish the game and make more difficulty modifications. I think I've got the game balanced just about the way I want it! Also, my best friend from back home did a test run as well, being able to finish the game himself in about 5 hours. More importantly, he commented that the game was thoroughly enjoyable and fun the whole time. The results couldn't be better! Considering the completion time, I've also started to add in some post-game secrets for the player to find. Another accomplishment was my demo video, which didn't take too long.

- **Challenges**

There honestly weren't that many challenges this week. My biggest obstacle was trying to use Camstudio – my recordings would always come out looking weird! If I tried to record a fixed area, the image of the video would be all skewed and the colors would be faded. If I tried a fullscreen record, the colors would come out looking washed while the frame rate would be painfully low. My easy fix for this: use Camtasia!

- **Time Spent**

3 hours Wednesday afternoon designing the final dungeon levels, 6 hours between Wednesday and

Thursday night spent on a full playthrough, 1 hour Friday afternoon getting a hold of my buddy,

debriefing him on the project, and sending him a copy, 3 hours Saturday night modifying enemy

statistics, skill & item properties, and character growth, 2 more hours Saturday night cleaning up

and commenting my scripts, 3 hours Sunday afternoon recording a demo video and editing it.

Total Time: 141 hours

- **Goals**

Well, as far as the design, structure, and aesthetics of the game go, I could hardly see myself

being any more satisfied. I plan on adding in post-game content to extend playability, which was a

suggestion from my tester. Also, I could use more suggestions like that of my tester's, so one of my

next steps would be to expand my testing group. Now that I know others can complete the game, I

feel safer having a larger pool of beta testers.

To: Dr. Jan Pearce

From: Richard A. Maestre

Subject: Final Descent IV

Date: November 27, 2011

- **Accomplishments**

This week I took it a little easy, considering the holidays and all. For my game, I added in a "boss rush" mode for those that have completed the dungeon – a "boss rush" is basically having to fight all the game's boss enemies back-to-back with no time to heal characters in between. Plus, I added in a super secret boss as the last encounter in that gauntlet. Also, I added some new "ultimate" skills that characters can unlock upon reaching level 25. Other than that, I did my demo evaluations as instructed.

- **Challenges**

My only real challenge was making the "boss rush", well, challenging. The bosses from the beginning portion of the game would prove quite weak in comparison to the fully decked-out characters a player would have at the end, so I had to create some supped-up versions of them. The challenge resided in finding a fine balance of difficulty for those enemies.

- **Time Spent**

4 hours Friday afternoon designing, test-battling, and tweaking the "MKII" version of bosses, 1 hour Saturday night finding and remixing some new boss music.

Total Time: 146 hours

- **Goals**

I plan on sending out this updated version to my testers to see what they think of it. I want to use their input to add the finishing touches to the program, seeing as how the deadline for completion is drawing close. For example, the inclusion of "ultimate" skills for characters was based off the opinion of a tester. Little tweaks like that are what I'm really looking forward to hearing about.

To: Dr. Jan Pearce

From: Richard A. Maestre

Subject: Final Descent IV

Date: December 11, 2011

- **Accomplishments**

I suppose I could say that this week, my accomplishment was to accomplish – I've finalized
everything for the full release of *Final Descent IV*. After tweaking the last apparent bugs over the
week, I was finally able to bump that release version up to 1.0. All that was left was to finalize the
design for my poster and send it in to be printed. I could not be more satisfied with this feeling of
completion.

- **Challenges**

I had to spend a good bit working out the kinks in enemy movement, as one of my testers
discovered that enemies on the map would be frozen if the player saves, quits, and resumes the
game. It became apparent that this was an inherent flaw in the function of the script I was using, so I
found a fix quickly and applied throughout my maps. It was rather frustrating trying to get the script
to work against its own messed up logic.

- **Time Spent**

4 hours on the 4th preparing my poster, 2 hours on the 5th fixing the script for enemy movement, 3 hours on the 6th gathering screenshots and finalizing the design on my poster.

Total Time: 155 hours

- **Goals**

To have an amazing poster session, breeze through the rest of my finals, and gloat about my awesome game to my family for the entire winter break!