Dungeon Master Battle Duels

Jacob Spigle, Zachary Painter, David Akridge, Hunter Figueroa

October 19, 2017

Contents

0.1	Introd	Introduction					
0.2	Proposed Solution						
0.3	Broader Impact						
0.4	Person	nal Interests	. 7				
	0.4.1	Jacob Spigle	. 7				
	0.4.2	Zachary Painter	. 7				
	0.4.3	David Akridge	. 7				
	0.4.4	Hunter Figueroa	. 7				
0.5	User Interface						
	0.5.1	Colors	. 8				
	0.5.2	Icons	. 8				
	0.5.3	Login	. 8				
	0.5.4	Register	. 8				
	0.5.5	Homepage	. 8				
	0.5.6	Search Page	. 8				
	0.5.7	Arena Page	. 8				
	0.5.8	Battlefield	. 8				
	0.5.9	Encounter Profile	. 8				

	0.5.10	User Profile Page	8
0.6	Techni	cal Goals	9
	0.6.1	Overall Goals (Requirements???)	9
	0.6.2	Project Timelines (Milestones???)	9
	0.6.3	Communication	9
	0.6.4	Research	9
	0.6.5	Budget	9
0.7	Server	Design	10
	0.7.1	User Roles	10
	0.7.2	Node.js	10
	0.7.3	Express.js	10
	0.7.4	Multer	10
	0.7.5	Mongoose	10
	0.7.6	Server Sequence Diagrams	10
0.8	Databa	ase Design	11
	0.8.1	Schemas	11
0.9	Applic	ation Design	12
	0.9.1	Design Patterns	12
	0.9.2	Accessibility	12
	0.9.3	Types of Views and Controllers	12
	0.9.4	In-Game Roles	12
	0.9.5	Map / Environments	12
	0.9.6	Turn Structure / Order	12
	097	Computer Opponent (A.I.)	12

	0.9.8	Encounter Diagnostics (Stress-Tester)	12
	0.9.9	Encounter Browser	12
	0.9.10	Encounter Creator Tools	12
	0.9.11	Storyboards	12
	0.9.12	Version Control	12
	0.9.13	Data Processing from API (WHAT DOES THIS MEAN??	??) 12
0.10	Resear	ch	13
	0.10.1	Node.js	13
	0.10.2	Express.js	13
	0.10.3	Angular 4	13
	0.10.4	Bootstrap 4	13
	0.10.5	MongoDB	13
	0.10.6	RESTful	13
	0.10.7	Game A.I	13
0.11	Appen	dix	14
0.12	Figure	s	15
0.13	Tables		16
0.14	Refere	nces	17

0.1 Introduction

Throughout history, man has always desired to be, like, a weird lizard/dragon hybrid thing.

0.2 Proposed Solution

0.3 Broader Impact

- 0.4 Personal Interests
- 0.4.1 Jacob Spigle
- 0.4.2 Zachary Painter
- 0.4.3 David Akridge
- 0.4.4 Hunter Figueroa

- 0.5 User Interface
- 0.5.1 Colors
- 0.5.2 Icons
- 0.5.3 Login
- 0.5.4 Register
- 0.5.5 Homepage
- 0.5.6 Search Page
- 0.5.7 Arena Page
- 0.5.8 Battlefield
- 0.5.9 Encounter Profile
- 0.5.10 User Profile Page

- 0.6 Technical Goals
- 0.6.1 Overall Goals (Requirements???)
- 0.6.2 Project Timelines (Milestones???)
- 0.6.3 Communication
- 0.6.4 Research
- 0.6.5 Budget

- 0.7 Server Design
- 0.7.1 User Roles
- 0.7.2 Node.js
- 0.7.3 Express.js
- 0.7.4 Multer
- 0.7.5 Mongoose
- 0.7.6 Server Sequence Diagrams

0.8 Database Design

0.8.1 Schemas

User Schema

Arena Schema (HAHA THAT RHYMES)

Encounter Schema

Combatant Schema

Obstacle Schema

- 0.9 Application Design
- 0.9.1 Design Patterns
- 0.9.2 Accessibility
- 0.9.3 Types of Views and Controllers
- 0.9.4 In-Game Roles
- 0.9.5 Map / Environments
- 0.9.6 Turn Structure / Order
- 0.9.7 Computer Opponent (A.I.)
- 0.9.8 Encounter Diagnostics (Stress-Tester)
- 0.9.9 Encounter Browser
- 0.9.10 Encounter Creator Tools
- 0.9.11 Storyboards
- 0.9.12 Version Control
- 0.9.13 Data Processing from API (WHAT DOES THIS MEAN???)

- 0.10 Research
- 0.10.1 Node.js
- 0.10.2 Express.js
- 0.10.3 Angular 4
- 0.10.4 Bootstrap 4
- 0.10.5 MongoDB
- 0.10.6 RESTful
- 0.10.7 Game A.I.

Pathfinding

Basic Rule Following (Non-A.I. Computer Opponent)

Decision Trees

0.11 Appendix

0.12 Figures

0.13 Tables

0.14 References