



CS 371 – Final Project Report

Members:

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Concept

- What is this game about?
 - This game is a Pokémon Arena. The main menu has two buttons, a start button and a help button. When a new game is initiated from the start button, the player will be able to select 1 of 3 random Pokémon, once he selects his Pokémon, he will be able to select another Pokémon from another set of 3 random Pokémon. This continues until the user has six Pokémon. Once he has his deck of Pokémon, he will battle against enemy trainers and see if we can beat all 3.
- Genre
 - Pokémon is generally an instance-based RPG, in this case it's going to have an RPG style combat, but arena (royal rumble) based gameplay.
- Character Design and Sketch



- Target audience
 - Pokémon players; which is anyone aged 3-99.
- Key Features
 - RPG-Style combat.
 - Sudo-random Pokémon matchups / Arena style Pokémon selection.
 - Potions commonly found in Pokémon games.
 - Start menu, Help menu
- References
 - Hearthstone
 - Pokémon Stadium
 - Pokémon Gameboy games

Game Mechanics

- This game is played using a Pokémon style menu loaded with tap events to navigate options such as fight, Pokémon switch, and item use. You can see a basic idea of what the menu looks like in Figure 1. The battle scenes look like Figure 2. The Pokémon select screen looks like Figure 3. You can see our game flow in Figure 5.

- Screenshot and artwork

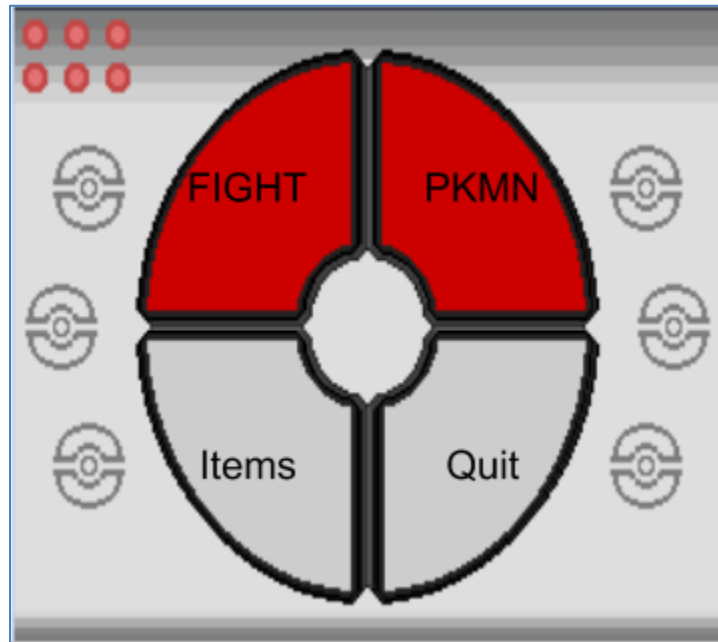


Figure 1 – Menu during Battle Scene

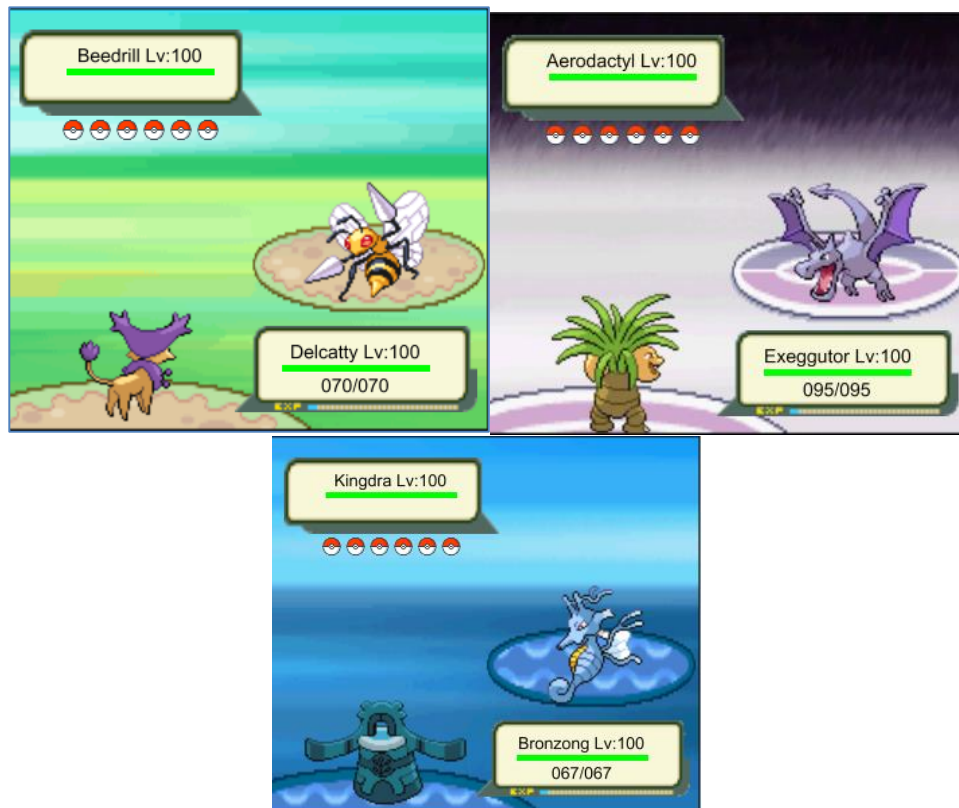


Figure 2 – Battle Scene

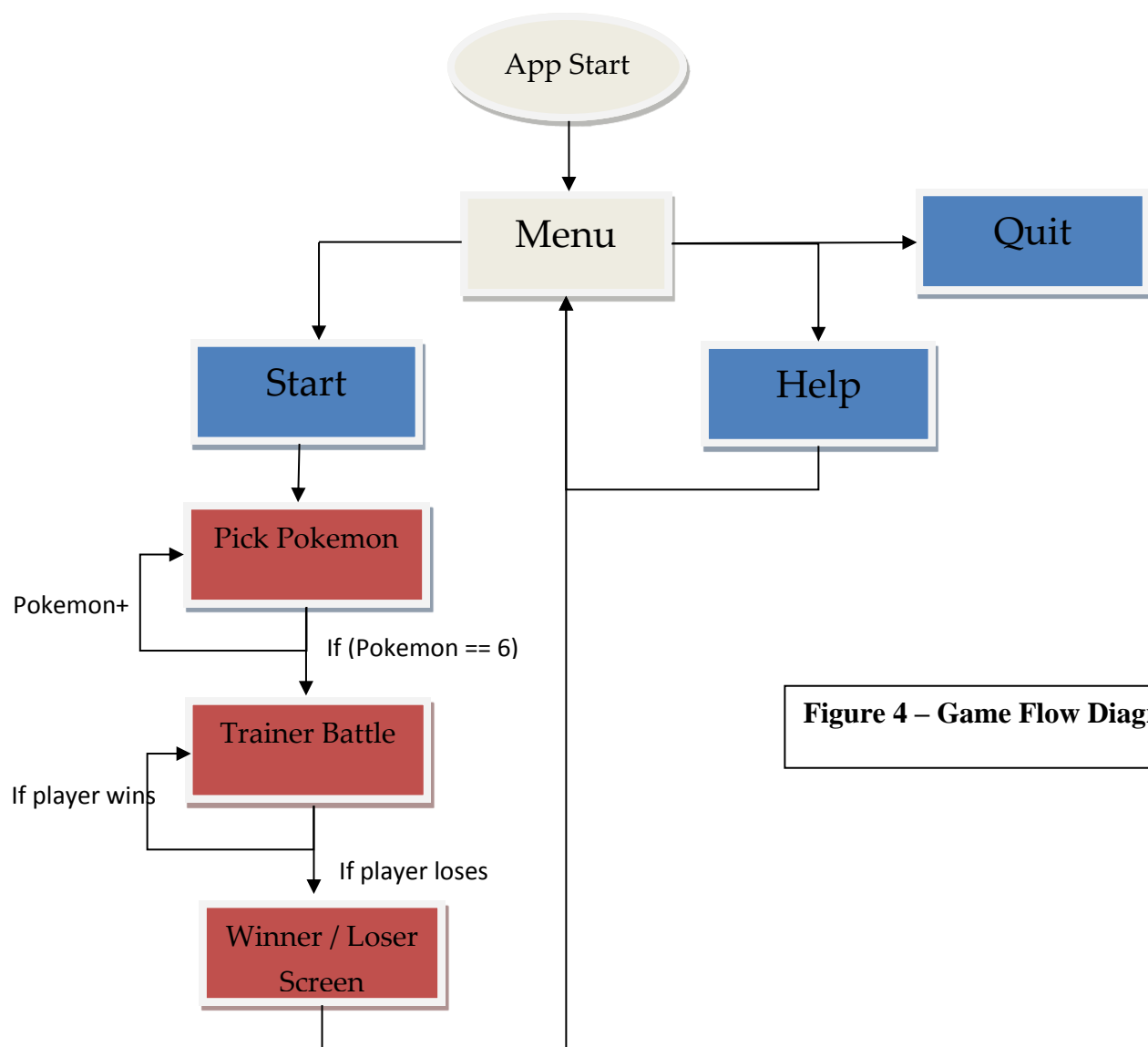


Figure 4 – Game Flow Diagram

Menu	Play button Help button Quit button
Play button	Takes us to the Pokémon select scene
Help button	Shows new scene that explains game mechanics / how to play.
Quit button	Closes Application

Figure 5 – Game Flow Table

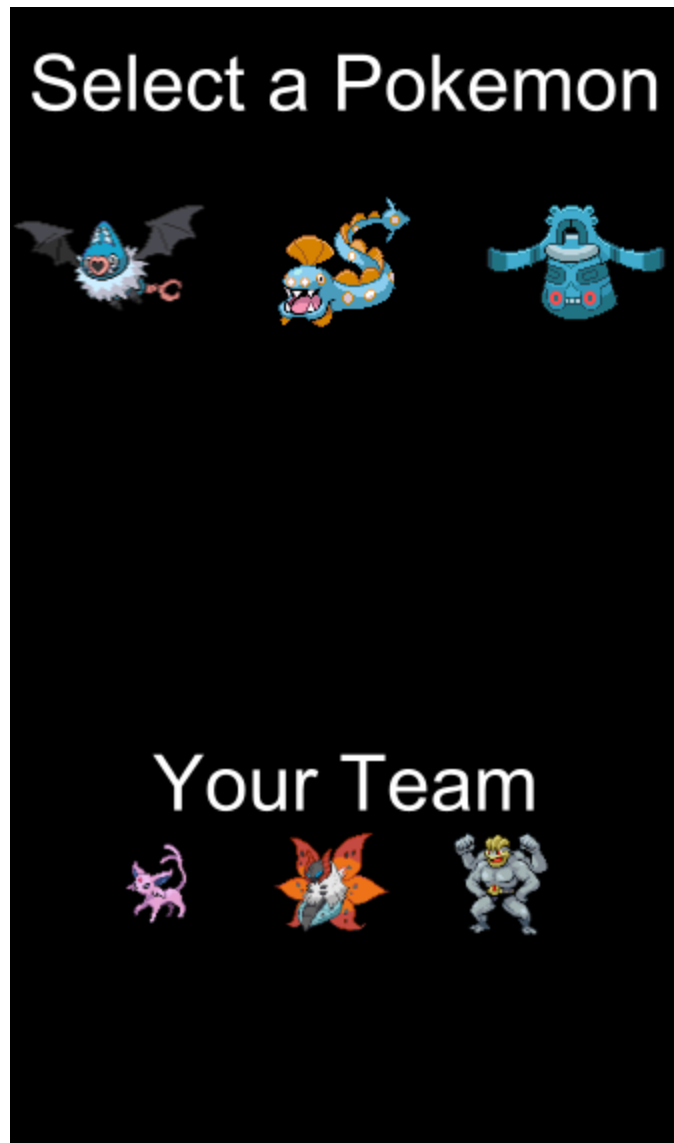
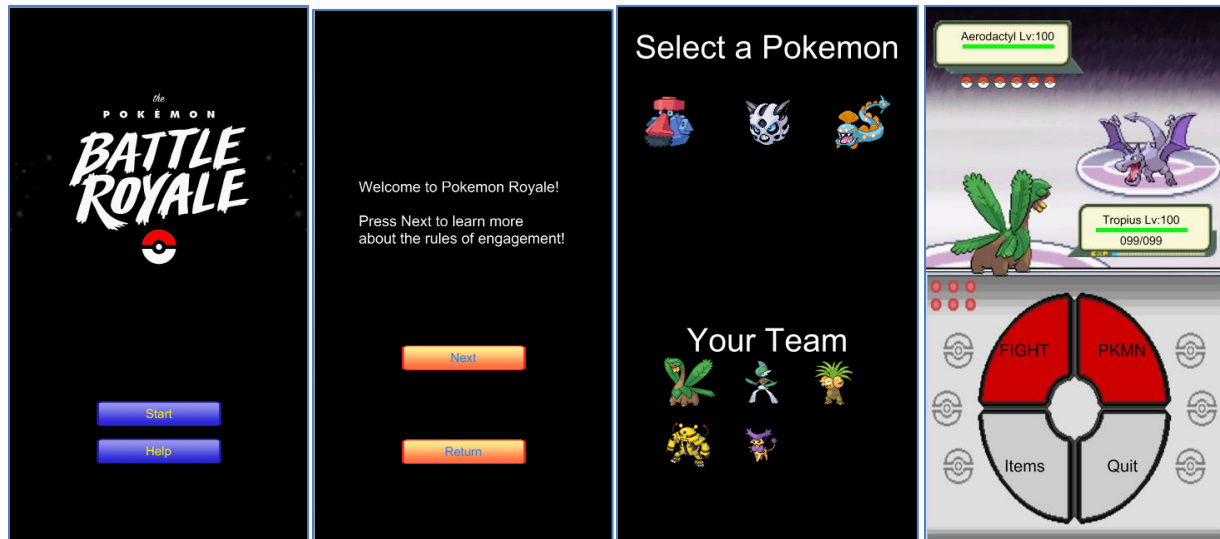


Figure 3 – Pokémon Select Scene

- Gameplay example
 - You can see our gameplay in the following [video](#) we made.
- Control Scheme and Interface
 - You can see our control scheme and interface in the following [video](#) we made.
- Scoring System and Achievements
 - There is no scoring system per say. The point of the game is to beat all three trainers. If you lose to any trainer along the way you lose the game.

- Screen Flow



- How your original design has been changed and why?
 - The core game of our final product has not changed much from what we originally intended it to be. The graphics, however, changed a lot. The reason why the graphics changed so much is because we found so many cool sprite sheets and images online that we wanted to upgrade our simple graphics to these more professional looking ones.

Tech

- Issues
 - **Graphics** was not an issue. We found a lot of sprites online, took them into Photoshop and changed them or sliced them. Used parts of them for buttons and overlaid the buttons on top of the background until it looks flesh.
 - **Camera** wasn't an issue, we have no camera.
 - **Control Interface** was a little tricky to figure out, but in the end it worked out well. We think the game looks good visually and controls well.
- Target Platform
 - Android platform, native resolution, portrait only, no landscape because of design space issues. This stayed the same.

- Graphics Assets

2D		
E_trainers		
	Blue	
	Bugsy	
	Clair	
fightScene		
	animations	
		battleIntro
		battleIntro2
		pkmnSummon
		lucasThrow
	Menu	
		fight
		fightMenuBG
		fightMenuBtn
		fightMenuBtnOnClick
		Item
		itemMenuBG
		Main
		BagButton
		BagButtonOnClick
		enemyPokeball
		FightButton
		FightButtonOnC
		lick
		mainMenuBG
		PokemonButton
		PokemonButton
		OnClick
		RunButton
		RunButtonOnClick
		Pkmn
		pkmnMenuBG
		pkmnMenuBtn
		pkmnMenuBtnOnClick
		Quit
		cancelBtn
		cancelBtnOnClick
	Stages	
		GrassBG
		PsychcBG
		WaterBG
	enemyInfoBox	
	playerInfoBox	
	Trainer1	

gameScene	
	p1-p9
	t1-t9
menuScene	
	animations
	slash
	menuBtn
	menuBtnOnClick
	menuTitle
Pokemons	
	All pokemon...
	Battle
	select
b10	
Button	
p10	
Pokeball	
pokeballFainted	

- Audio Assets

Music	
Music	
	BlueBattle
	BugsyBattle
	ClairBattle
	Trainer Battle (STEREO) - Pokémon
	RedGreenBlueYellow
Sound	
	maxPotion
	menuButtonClick
	menuButtponClick
	normalEffective
	NotVeryEffective
	onPotionUse
	pokeballEffect
	pokeballEffect2
	pokemonSelectSound
	summon
	superEffective
	superPotion

- Required Resources
 - Software
 - Corona SDK
 - GIMP
 - Texture Packer
 - GitHub Repository
 - Advance Map
(<http://www.pokecommunity.com/showthread.php?t=127348>)
 - Sprite resources
 - Poke Stadium (<http://www.pokestadium.com/tools/sprites>)
 - Pokémon Trainers Sprite Sheet
(<http://kyogremaster.deviantart.com/art/All-Pokemon-Trainer-Sprites-137787432>)
- Work Division and Schedule.

Members			
Daniel	Fight Scene	Menu Scene + Defined pokemon	Game Mechanics + Items
Jairo	Pokemon Class + sqlController	Trainer Class, Fight scene	Win/Lose/nextEnemy scene
Jonathan	Help	Help2	Help3
Zach	Enemy_Trainer	Defining Pokémon	Game mechanics

Implementation

- Corona Libraries
 - Sqlite3
 - composer
 - widget
 - scene
- Flowchart



- Explain Data Structure and main functions
 - All of our Pokemon and Trainers are kept in a SQL-lite3 database. We have a sqlController.lua that gives us methods that can pull from the database based on ID's of pokemon and trainers. Our game is setup using scenes. Our main fight is controller by a series of buttons and action listeners, with our main function being moveMade(). This function is called after any attack and looks at both the player's pokemon and the enemy's pokemon, calculates the damage done to each using the Pokemon class, then display a series of text that illustrate what happened in the fight that turn.