Problem Statement:

On the PC platform there are very few offline turn based RPGs with elements of collecting and customizing a group of player controlled fighters(basically Pokemon).

Description of Scenario:

The key element of Pokemon is that you go around collecting and training pokemon to use in a turn based battle where the player controls all the actions of his pokemon. The game also contains elements of exploration and a typically long but simple story line. The games also contain many random elements which come in the form of combat attribute differences. Now, these first random elements can be eliminated with enough time expenditure on playing the game. However even after all this effort the player will end up winning or losing due to random events bound to accuracy, critical hits and another random element integrated into the damage equation. All of these random elements can get in the way when players are comparing how good they are.

Rationale for proposed product:

The program will be on the PC platform because this genre of game in English is very rare on it.

The following is a list of improvements that will be made:

Will use fewer resource than emulation of similar games

Repetitive tasks will have an automatic execution option

The player will have more non combat activities available

There will be no random elements in combat

The AI will be made to not use futile tactics that artificially prolong game play

The GUI will be optimized for use with a mouse

The player will also not be attacked by enemies who are too weak to be more than cannon fodder

Success Criteria for Product:

- Map Engine
 - The text and the background change color according to location
 - Lets player move about
 - Allows player to teleport
 - Runs all the animations
 - Allows entry and movement in buildings
 - Permanently changes according to ingame events
 - Dungeons generate infinitely
 - Dungeons will slowly kill the player
 - Certain areas can have unique movement rules
 - There are randomly spawned items
 - There are items that only spawn a set number of times
- Combat Engine

- 2 text displays with color for showing combatants
- 1 BW text display to show combat events and attack countdowns
- Turnbased
- Up to 6 on 6 combat
- Displays selected player side combatant and targeted enemy for non AOE abilities
- Shows queued attacks
- Allows use of items in the bag/inventory
- No chore fights where you win by spamming one attack
- No enemies will employ combat strategies that only serve to distance their inevitable loss. example: you take 90% of their HP so they heal back to 100% and this goes on for 4 to 20 turns
- Enemy AI will use complex strategies and react to the players actions

Crafting System

- Alchemy >> makes potions and gun type weapons
- Herbology >> gathers plants for various uses
- Mining >> gather metals and gems for various uses
- Blacksmithing >> craft metal weapons and armor
- Crystology >> turns crystals into various useful objects

Creature Collection System

- The habitat most similar to place of capture increases success rate
- Some creatures can be befriended into joining the player
- Some creatures have to be tamed by showing how much more powerful the player is
- Legendaries cannot be captured but will offer help in return for payments

Performance

• Do not use 100% of a single CPU core

While many gameplay depth enhancing features are not included however many of the map related features can very easily be added on through the current map system. To help with this there are pseudo code examples in the comments of the map files. The crafting system is also completely left out due to time constraints however can be added easily with a pseudo code guide in the actual inventoryGUI. I really love my program; it's very modular. Much of this project is based on the fact that I plan to eventually make it into a fully fledged game and not just a 2D java game engine demo.