

Trainer (abstract)

Responsibility

Holds Pokemon

Heals its Pokemon

Determines if it has
healthy Pokemon left

Collaborators

Pokemon

UserTrainer

EnemyTrainer

PokeModel

UserTrainer

Holds Pokemon

Sets enum for pokmeon
to user

Can add pokemon

Pokemon

PokeModel

EnemyTrainer

Holds Pokemon

Pokemon

Sets enum for pokmeon
to user

PokeModel

Can add pokemon

Holds intro and outro
strings

BattleController

Responsibility

Takes in the Trainer and the Enemy and waits for user input from the view.

Handles the win conditions and checks for when a player is out of usable pokemon.

Collaborators

Events

BattleState

AIUtility

BattleSimulator

BattleSimulator

- Interact attack between two pokemon
- Handle pokemon dying when health goes out
- Return events to the BattleController

Pokemon

Type

UserTrainer

EnemyTrainer

Battle Calculator

BattleCalculator

- Handle a single attack between two pokemon.
 - Updates pokemon health and does all necessary calculations.
- | |
|---------|
| Pokemon |
| Type |
| User |
| NPC |

Pokemon

- Holds pokemon stats
- Holds pokemon moves
- Holds pokemon species
- Holds pokemon types
- Holds pokemon current health
- Holds trainer type
- Holds nickname
- Holds national dex number
- Move
- Trainer
- Type
- Battle Utility
- Pokemon Loader Utility
- Team Creator Utility

Move

Has Damage Type

Has Damage

Has Accuracy

Has move type

Pokemon

Battle Utility

PokemonType

BattleSimulator

AIUtility

Pokemon Chooser

<<Enumeration>>

PokemonType

- Creates enum objects for Normal, Fire, Water, Electric, Grass, Ice Fighting, Poison, Ground, Flying, Psychic, Bug, Rock, Ghost, Dragon, Dark, and Steel types
- Pokemon
- Battle Utility
- Move

<<Enumeration>>

TrainerType

- Creates enum objects for whether Pokemon is User or NPC
- UserTrainer
- EnemyTrainer

AI Utility

Chooses Moves for AI
Chooses moves in a
weighted random form

Pokemon
Move
Type
BattleControl

InfoPanel

Responsibility:

- Displays Images of Pokemon
- Displays Pokemon Health
- Displays Pokemon Name

Works with:

- MenuLayoutManager

PokemonImage

Responsibility:

- Draw a Pokemon
- Animate the Image
- Swap Images

Works with:

- BattleState

MenuButton

Responsibility:

- Draws a String

Works with:

- MenuLayoutManager

BattleState

Responsibility:

- Controls Input for Battles
- Controls Drawing Battles
- Updating Menus
- Handling Events

Works with:

- PokeModel
- InfoPanel
- BattleControl
- MenuLayoutManager
- MenuButton
- InfoPanel

BlackScreenState

Responsibility:

- Be Black

Works with:

- Nobody

SplashScreenState

Responsibility:

- Display a Splash Screen

Works with:

- Nobody

MainMenuState

Responsibility:

- Controls the Main Menu
- Handles setting the correct enemy

Works with:

- MenuLayoutManager
- PokeModel
- MenuButton

TeamPickerState

Responsibility:

- Handles Choosing a new team
- Randomizes a Team

Works with:

- MenuLayoutManager
- PokeModel
- MenuButton
- InfoPanel
- PokemonLoaderUtility

PokemonLoaderUtility

Responsibility

Read information from xmls

Load non-unique attributes for Pokemon

Load attributes for moves

Get list of all Pokemon

Get list of all moves for specific Pokemon

Collaborators

Pokemon

Move

RandomCreatorUtility

Responsibility

Creates a trainer with a specified number of randomized Pokemon (random species and 4 random moves)

Create a Pokemon with random species and 4 random moves

Collaborators

UserTrainer

EnemyTrainer

Pokemon

Move

TrainerLoaderUtility

Responsibility

Read information from xmls

Create a Trainer from the index of the professor
sequence

Collaborators

UserTrainer

EnemyTrainer

PokemonLoaderUtility

TeamCreatorUtility

Responsibility

Display the PokemonCreatorPanel

Extract information from panel

Create Pokemon from user chosen Pokemon and moves

Collaborators

PokemonCreatorPanel

PokemonLoaderUtility

PokemonCreatorPanel

Responsibility

Holds drop down lists for Pokemon

Hides and shows moves drop down lists whether a Pokemon is chosen

Holds four drop down lists for each move for the chose Pokemon

Collaborators

TeamCreatorUtility

PokeModel

Responsibility

Hold a user

Hold an enemy

Keep track of professor the player is on

Collaborators

UserTrainer

EnemyTrainer

Events (abstract)

Responsibility

Be implemented by all events so that we can put those events together in an ArrayList.

Collaborators

TextOutputEvent
UserDefeatEvent
UpdateHealthBarEvent
EnemyDefeatEvent
SwitchPokemonEvent

UpdateHealthBarEvent

Responsibility

Communicate to the GUI that the HealthBars need updating.

Collaborators

Events
BattleState

TextOutputEvent

Responsibility

Communicate to the GUI that a given text must be displayed.

Collaborators

Events
BattleState

UserDefeatEvent

Responsibility

Communicate to the GUI that the player has lost the game.

Collaborators

Events
BattleState

EnemyDefeatEvent

Responsibility

Communicate to the GUI that the user has won the game.

Collaborators

Events
BattleState

PokemonSwitchEvent

Responsibility

Communicate to the GUI that a pokemon needs to be switched out.

Collaborators

Events
BattleState