Pokedeck Report

Student : Nathan Wolf

Github code repository : https://github.com/Wolf-Nathan/Java/tree/master/Pokedeck

The goal of this project was to create a software to manage our collection of Pokemon cards who is call Pokedeck. This software is develop in Java and use essentially the Swing collection who permits to create frame, button and others components.

When I start my first reflection was how a card will be represented and how I can make the different features after that. So I decide a card will have a name, a description, an id, a type and health points (HP). But at beginning I make the choice to work with cards with only name and description because I think it will be easier to make the others features with simple cards. It's only after I have realized all the features that I have the others card's attributes.
Final the attributes of a card are :

- a String name : the user enter the name when he add a new a card.
- a String description : the description is also enter by the user when he adds the card.
- an int ID : the ID is generated automatically when the card is added. Each ID is unical and have a value between 1000 and 100 000. ID attribute differentiates two similar cards.
- a String type : when the user add a card he has an option to select a type from a JComboBox list of predefined types.
- an int HP : the HP of the card are generated automatically when the card is added. I think it brings more randomness at the creation of a card and that the element who will determine if a card will be strong or not. Each HP have a value between 30 and 200.

So a card is a java object, to storage all the cards I use an ArrayList of the type Card who permits to collect them and manage them. This ArrayList is initialize in the Main class and I through them in each class, to have the data of the collection.

Features :

- Add a card :

When the user start the Pokedeck and click on the button "New Card" a new window appears where the user can define the name, the description and

the type off a card. Then to confirm he clicks on the button “Add card”, the id and the health points were generate automatically and the card will be create with these attributes save in the Pokedeck automatically.

-Remove a card :

When the user start the Pokedeck and click on the button “Remove Card” a new window appears with a button for each card “Remove card name - card id”. To remove a card the user click on the card that he wants to remove.

-Edit a card :

The system for editing a card is similar a the feature “Remove Card” when the user click on the button “Edit Card” a new window appears with a button for each card. The user click on the card he wants to edit, this action who create a new window where the user can edit the name and the description of a card. I don’t permits the user to edit type, id and hp of a card because I think it was illogical. When the user click save his modifications, the program removed the card of the Pokedeck and create a new card with the old values and the new values edit by the user.

-Show collection :

When the user click on “Show collection” in the Menu a window with the list of cards in the Pokedeck appears. Each card is add in a component JLabel we can read the name, the description and the ID of each card. Moreover when we are in this feature we can research a card by name or by id. In the top of the window we have two JRadioButton to select what will be the element of research, name or id, then we enter in a JTextField the strings we want to research. After this action the actually ShowCollection window will be close and a new ShowCollection window will appear but only with the card contains the string of the research in the name or the id.

-Save/Load Pokedeck :

After the user have make his Pokedeck collection and he wants to exit the software he cans save his collection. For them he has only to click on “Save Pokedeck” in the Menu. To permits this function I make classes Card and Menu implements the class Serializable. This class permits to serialize an object and if the class Card is serializable the Pokedeck who is an ArrayList<Card> can be serializable. Then when the user restart the

Pokedeck he only has to click on “Load Pokedeck” to load data in his file pokedeck.serial . One problem exists at this point if the user click on “Save Pokedeck” before to load his Pokedeck the software will be save an empty Pokedeck which will have the consequence to erase the Pokedeck that the user has saved before.

Conclusion :

_____This project permits to me to learn how use the Swing java collection and it was easier that I thinked when I have start the project. I have encounter few problems and bugs during the realization but I succeeded to correct all of them. So I enjoy to make this project.