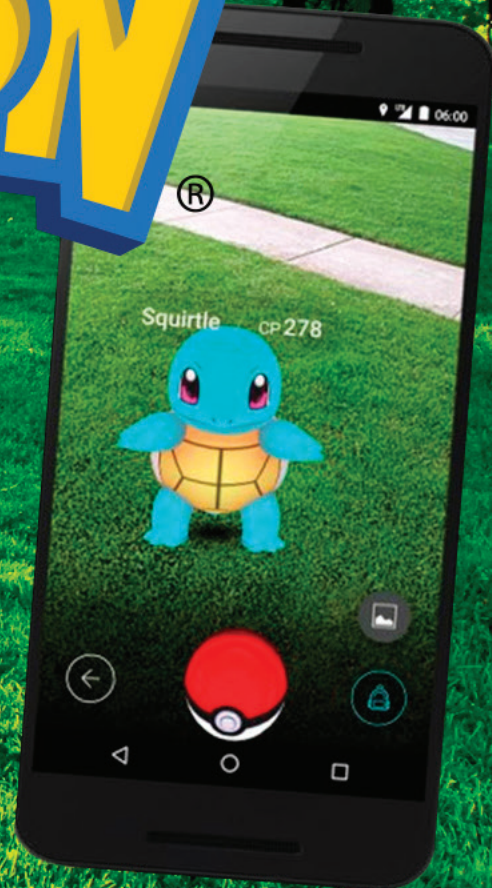
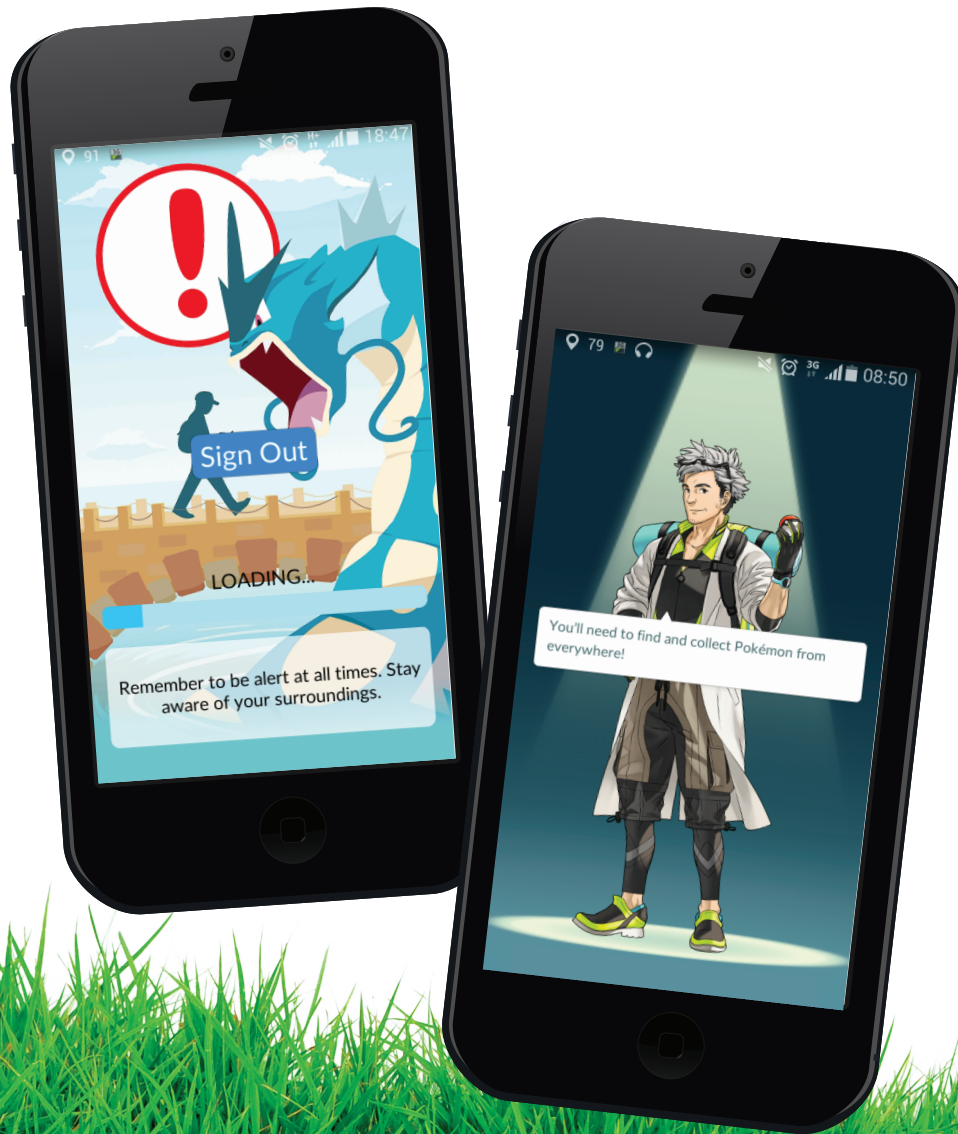


POKÉMON

GO





The team WEIS (based on the initials of our majors) consists of the Alain Lifmann, Robin van Geel, Michelle van Lieshout, and Nora Baltus.

The sub-team consists of Michelle van Lieshout (0842761) and Nora Baltus (1000558).

For this assignment we have chosen to analyze the popular game Pokémon Go by Niantic.

Question number





Poké stops and gym on the map

A few in game items

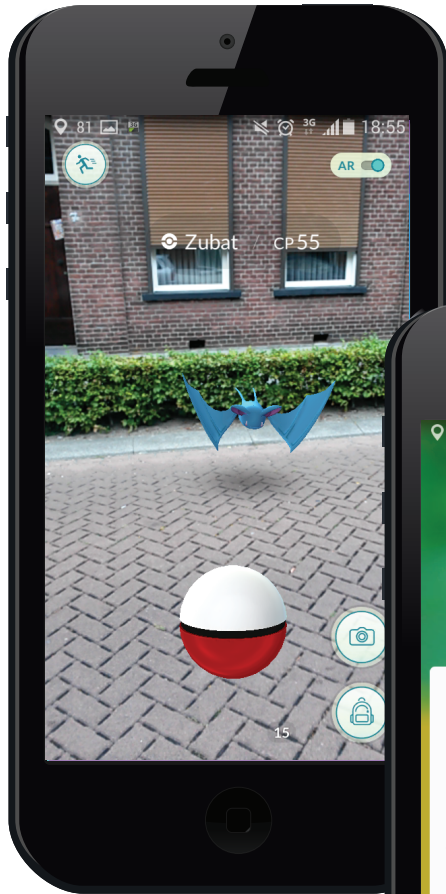
Pokémon Go allows players to capture popular cartoon creatures, Pokémon, in real life by providing a virtual world on top of the real world using maps and VR camera overlays. The player is represented by an avatar. The level of the user and the in-game achievements earned are tied to this avatar.

The player can choose to become part of one of three rivaling teams in level 5. The game world consists of a cartoon version of the map of the region where the player is currently located. Pokémon spawn on this map but change location all the time, allowing the player to catch them when they look for them.

Pokémon come in different levels and with different abilities. The higher the Pokémon's level, the harder it becomes to capture that Pokémon (his combat power is higher). There are also two special locations that can be found on the map: Poké Stops, where the player can get free in-game items, and Gyms, where the player can choose to battle other players' Pokémon. If the gym in question has been conquered by another player from the same team, then the player can choose to make the gym stronger by defending it. But the player can also try to take over the game by battling with the defenders.

In-game items, such as Poké Balls, potions, raspberries, lure modules and eggs, play a big role in the game. You need these gadgets such as potions to let your Pokémon heal after a battle or to make them stronger. More different kinds of gadgets become available throughout the game. Poké Balls are used to capture Pokemon, and eggs will hatch into a Pokémon if the player has walked a certain number of kilometers. A few in-game items are dropped for free at Poké Stops, but the player can also choose to purchase these items in the game's store.





Catching Pokémon



Pokémon details



In 'Pokémon Go', the player's main aim is to 'catch them all'. In other words, this means that the player tries to collect all different Pokémon. The game makes use of the player's geolocation, and to find Pokémon, the player has to walk around in the real world. When a player comes near a Pokémon, it appears on the screen of the player's phone, and they can choose to try and catch it by throwing 'Poké Balls' at it. This can be done by placing a finger on the Poké Ball icon and swiping it in the direction of the Pokémon. Pokémon sometimes escape the Poké Ball or run away altogether. This makes the game unpredictable. By means of clicking on an icon, the player can see which Pokémon are in the neighborhood and start looking for them. The game consists of many different levels. When a player reaches level 5 and has gotten some feel for the game, he can pick a team (red/yellow/blue) and participate in gym battles. This adds new challenge to the game besides leveling up and trying to collect different Pokémon..

A gym is reigned by one of the three teams. The player can choose to either battle there to increase the prestige of the gym, if it is held by the player's team or to win the gym away from another team.

As the player's level increases, the player can catch stronger Pokémon, and more Pokémon become available. Furthermore, the player can use items such as raspberries, stronger Poké Balls, lure modules, etc. to make it easier to catch Pokémon and to level up faster. Items such as potions allow the player to heal his Pokémon after battle, or to make them stronger. Different kinds of items become available throughout the game.





Poké stop

Effects during
evolution

New Poké Balls or eggs containing Pokémon can be found at Poké Stops, which are located near art work in the real world. If a player visits a Poké Stop, he can collect new items, see the artwork and meet other players that are near the Poké stop. This adds a social element so it becomes more fun. Poké Stops are reloaded every couple of minutes. The player can also choose to buy items for money if waiting at a Poké Stop is not possible, or when the player runs out of Poké Balls while catching Pokémon.

The design of the game is cartoonish and resembles the Pokémon series that are shown on TV. The narrative of the game is based on this series: become the best trainer (by owning the strongest Pokémon), and catch all Pokémon. The player can earn badges that show the player's accomplishments during the game, such as having walked a certain number of km's or having caught a certain number of Pokémon of a specific type. The game also incorporates sound effects known from the series to make it more enjoyable. Lastly, the player can use his camera to see Pokémon in his actual environment when they are nearby. The most interesting aspect of Pokémon Go is the fact that when a player is occupied with catching Pokémon, the player is actually tricked into living a healthier lifestyle by forcing the player to walk more than they normally would have. And enjoying the summery air is also fun!





Customized avatar

Gym battle

Pokémon Go plays to the nostalgic feeling of the 90's kids that watched the TV series. Belk (1990) suggests that generations have their own collective memory [1]. Pokémon can be seen as a collective memory for this generation. Davis (1979) believes this collective memory influences the sort of products that people buy and use [1]. Finding Pokémon in the real world is therefore a dream come true for a whole generation. Since the game is based on the popular TV series, it follows a storyline. This gives meaning to the interactions in the game.

Players have to walk in order for their customized avatar to move. This allows players to encounter other players in real life at gyms, Poké Stops, or near uncommon Pokémon. Nevertheless players can't see the avatars of other players moving around in the game. Players who, for example, missed the opportunity to catch the famous Snorlax that appeared on the crossing in China, will undoubtedly feel connected and can relate to each other.

The game is a fantasy brought to life. This is something people search for when playing games. The game involves competition as well. Gym battles indicate how good a player is. The player can get confirmation or disconfirmation, this gives the player a reason to improve.

The game builds up in what you can use and collect; rare Pokémon can be found when the player is in a higher level and at certain locations. As the game is not skill based (besides throwing Poké balls) but more effort based (walking, exploring) this works to create a flow. Instead of becoming more competent the players Pokémon become stronger and you learn more about gadgets and this fantasy world. This keeps you engaged.



Team choice and
player information

Catching a
Pokémon visual



The player has a large influence on the game as it is based on the player's location. Everything is determined by the locations the player visits, and the distance the player walks. This increases the feeling of autonomy for the player and the intrinsic motivation the player has to play the game.

The game makes use of the hero's journey. Until level 5, the player is simply getting to know the world by experimenting with what he can do. In level 5, the player can pick a team and start battling at the gyms. Once the player has reached the end of the game by collecting all Pokémon, the player can still continue playing the game in a number of ways; the player can, for example, help newbie's take over gyms or keep on playing while there is nothing absolutely new. And maybe his view upon this Pokémon infiltrated world has changed..

Besides the nostalgia, competition, parts of the self-determination theory, some sort of flow, and the hero's journey, the game also incorporates a 'game feel'. When the player tries to catch a Pokémon, there is a chance the Pokémon will escape. This is accompanied by striking visuals such as a shaking Poké Ball and flashing lights. All actions are exaggerated. The animations that are used polish the game and the sounds take the player's highs even higher.

Lastly, the long term goals of the game, such as becoming the best Pokémon player and catching all Pokémon, encourage the player to go on with the game.



Everything is
far away



When Pokémon Go is looked at as a mathematical system, it consists of the following objects, attributes, internal relationships, and environment [3]:

Main objects:

- The avatars of the people playing the game;
- Pokémon as digital creatures within the game;
- Poké Stops and gyms as locations within the game and the real world;
- Poké Balls / eggs / potions / egg incubator / raspberries: items.

Attributes:

- The locations of Pokémon as given by the game server and the time they will stay there;
- The locations that are picked to be a Poké Stop or gym (real world artwork);
- The movement of the player's avatar as guided by the GPS on the phone;
- The combat power given to a Pokémon, the chance it is caught and the strength of a certain attack move that a Pokémon knows initially;
- The initial amount of Pokéballs a player gets;
- The items a player can find at a Poké Stop (eggs, potions, Poké Balls, etc.) and how long you have to wait for the Poké Stop to refill.

Internal Relationships:

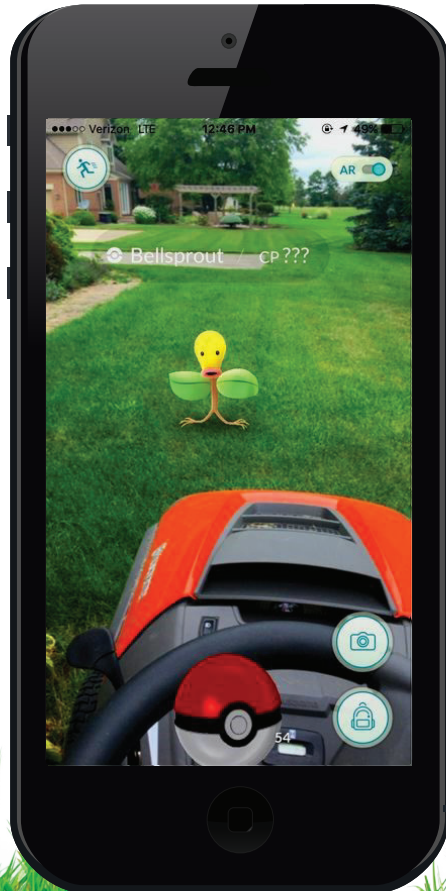
- The distance between the location of a player to the location of Pokémon, gyms, and Poké Stops. Example: being further away to stops and Pokémon and needing to walk to them increases the level of difficulty.
- The rules considering the interaction that is possible between a player's avatar and in-game elements, such as Pokémon, Poké Stops, and gyms. Such as catching (in case of Pokémon), hatching (in case of egg), and getting items (in case of Poké Stop). To give an example: your team choice determines if you fight to get a gym up in prestige or to take over the reign.

Environment:

The real world and the digital fantasy world in the context of play.



The real world location of the player and his perception of the game



When Pokémon Go is looked at as an experiential system, it consists of the following objects, attributes, internal relationships, and environment [3]:

Main objects:

The various players and their phones (GPS)

Attributes:

- The level of the player and the Pokémon and items the player has (the state of the game);
- The location of the player based on the GPS in their phone.

Internal relationships:

Since players are the objects and their location in the real world plays a role within the game, players (can) meet at Poké Stops or gyms and get to know each other and the Pokémon of their opponents in the real world (which the game does not show in the digital world). Because players (can) interact, their psychological, emotional, and social relationships and communication are parts of the internal relationships (the player's team choice and level play a role in this, in other words: the state of the game influences this).

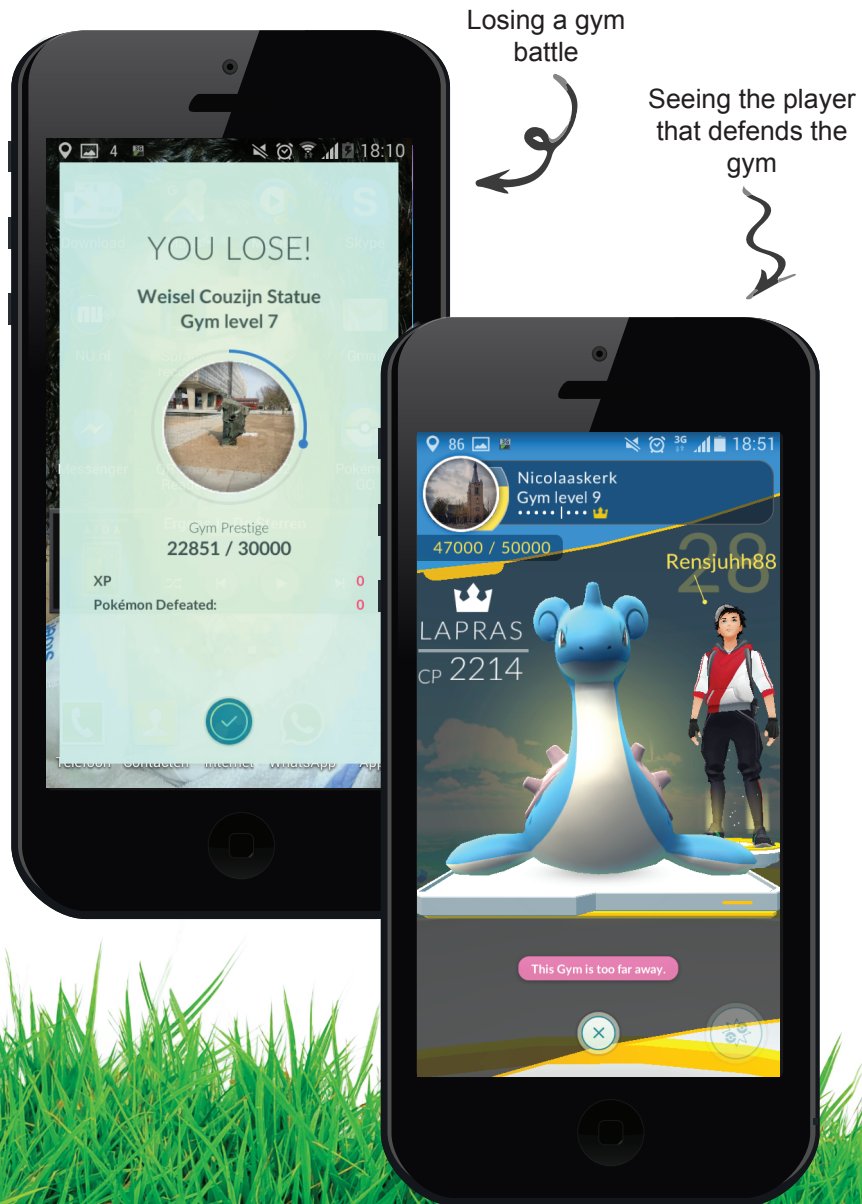
Environment:

- The perception the players have of the game and any of their preconceptions;
- The real-world location and environment of the players;
- The software environment of the game on players' phones.



Pokémon owned by a player





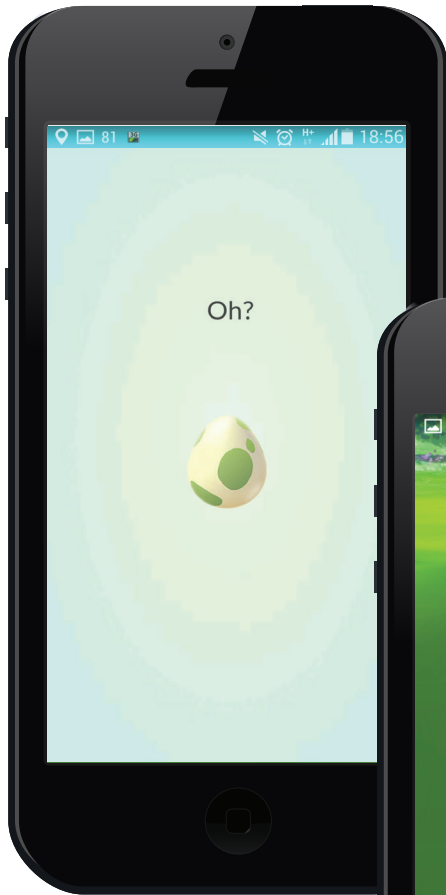
The mechanics of Pokémon Go describe the parts that make up the game. These parts can be depicted using a class diagram. On the next page a simplistic version of a class diagram can be found, this diagram could underlie the functionality of Pokémon Go. This perspective includes the elements that have been mentioned in the answers to questions 5 and 6. These elements make the game fun. From this perspective we can see that there is no (direct) connection between players in-game in any way. This is a weakness in the mechanics for a game that encourages social play.

From a Dynamics perspective, Pokémon Go offers Fellowship - by allowing players to defend a gym of their team and meeting people in the real world when being at such gym, Discovery - by allowing the player to search for different types of Pokémon at different places, Fantasy - by making the player believe that Pokémon exist in the real world, and Submission - since players use the game as a pastime. Fellowship is limited to gym battles and real life meet ups at gyms or Poké stops. Those meet ups however are not supported in the digital environment of the game.

The most important influence on the aesthetics of Pokémon Go is the goal of the game: to become the best Pokémon player in the world. The player's devotion to becoming the best Pokémon player is encouraged by in-game achievements that are part of both the mechanics (in terms of what can be achieved) and the dynamics (in terms of how they can be achieved) of the game. The striking visuals that are used to depict actions like catching a Pokémon, winning/losing a gym battle, or hatching an egg, also contribute to the game's aesthetics.

[2]

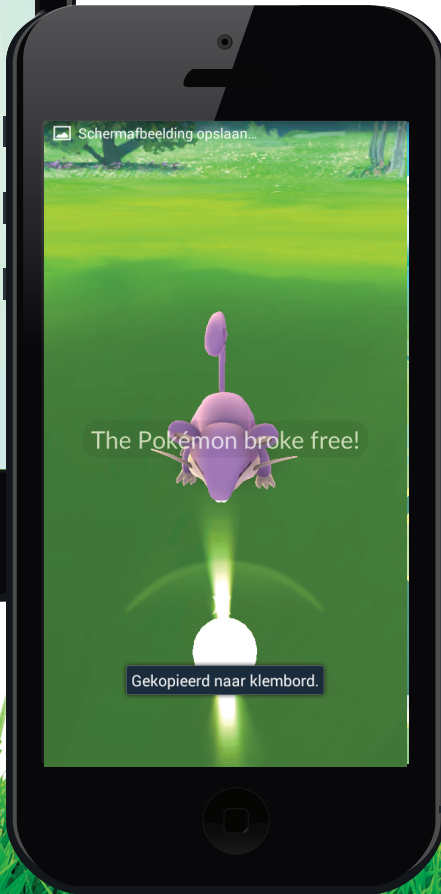




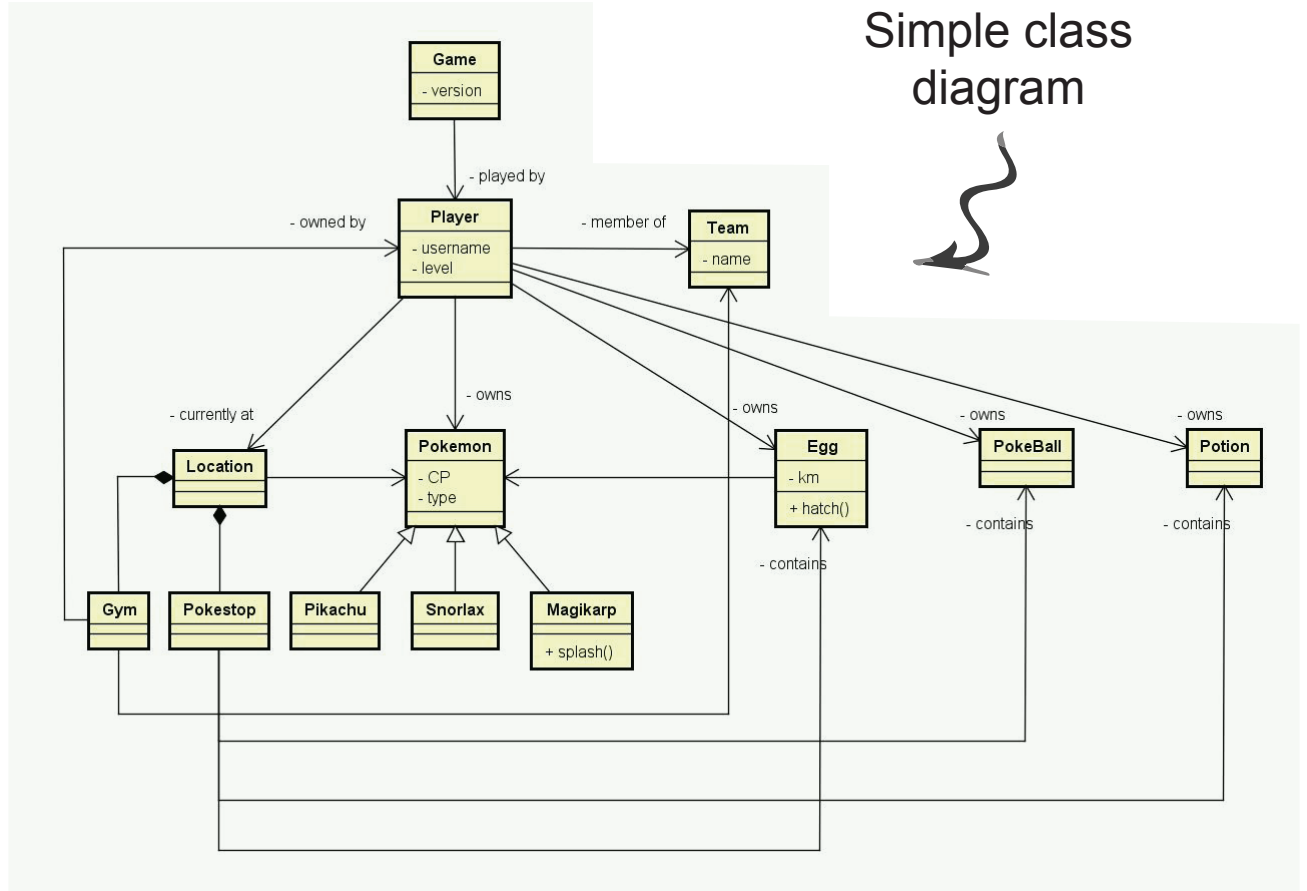
Hatching an egg

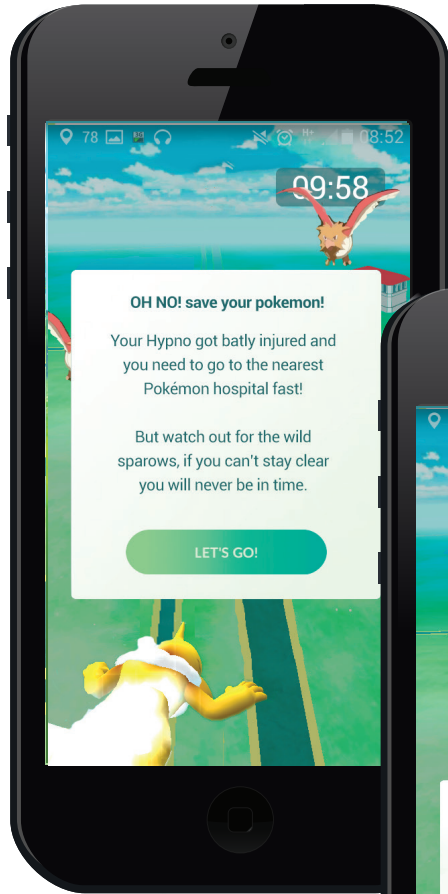


A Pokémon escaping while trying to catch it

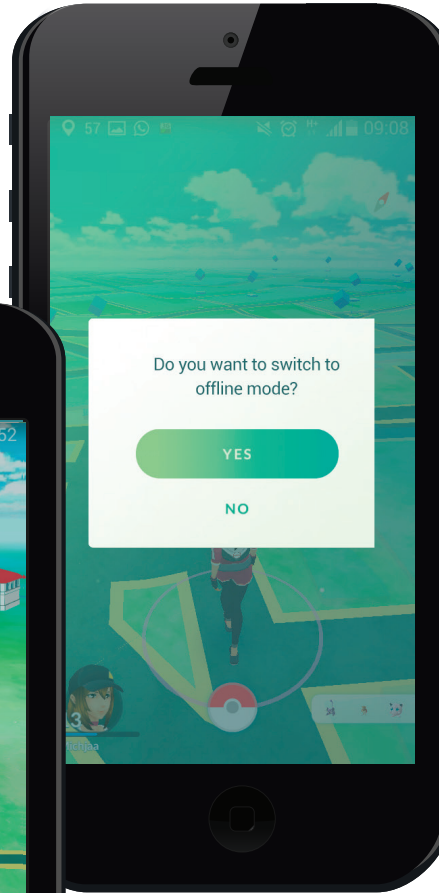
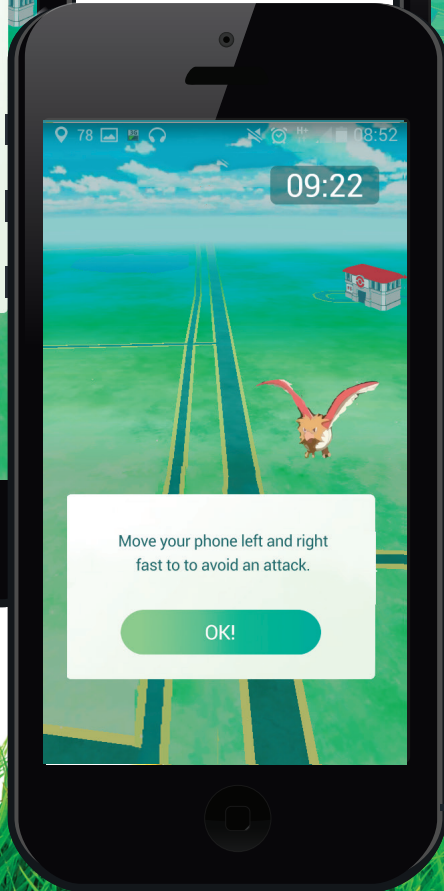


Simple class diagram





A mini game to decide if you may level up based on Pokémon's first TV episode



Offline mode



Pokémon Go is an interesting game for the exploring player type, because to explore the virtual world, the player also has to explore art works and special locations in the real world. For other player types, however, the game could be improved in a number of ways.

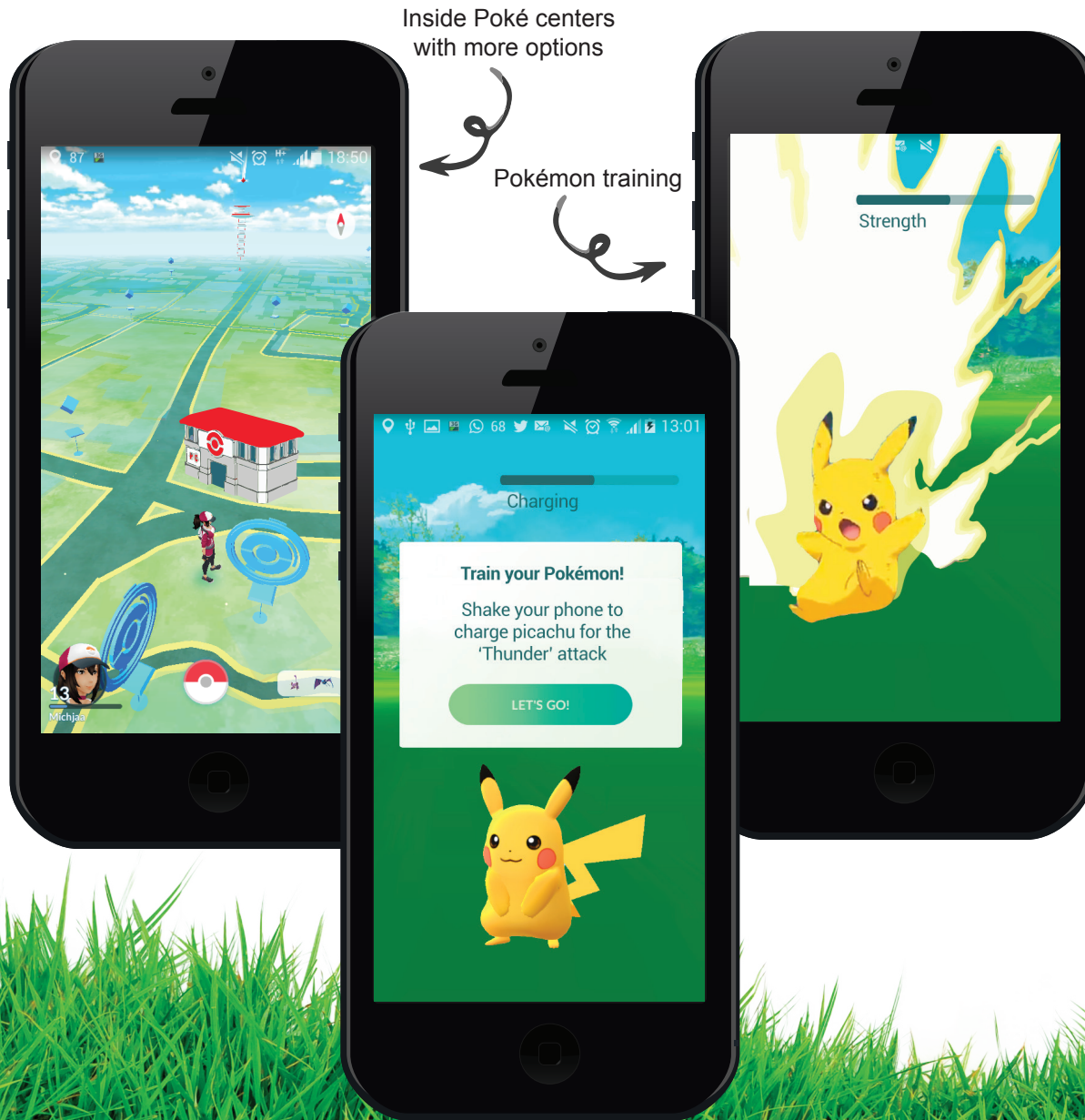
The mechanics of the game, for example, can be improved by changing the way the distance a player has walked is tracked. Pokémon Go currently forces the user to enable 3G/4G for this, and many people have limited data. It would help if the game had an offline mode, and kept track of this data using the phone's GPS. This would also allow the player to play the game for more than half an hour before his phone battery is empty. And motivate the player to walk more.

In the answer to question 7, we discussed how the game does not encourage players to improve their skills, because a continuous effort is the only thing that is required to progress in the game. Skills are an important part of the flow theory. Even though the game introduces new items and Pokémon as the player's level increases (which encourages them to learn new things), there is still room for improvement. If Pokémon Go included mini-games, a mechanism to make catching Pokémon harder or a way for the player to work for Poké Balls rather than simply visiting a Poké Stop, this would allow the player to improve his skills. This feature should also appeal to the competitive player type.



We also discussed how many players relate to the game because of their nostalgic feelings towards it. To encourage this, the game should resemble the TV series more than it currently does. A way to do this would be to allow players that are nearby and met up in the real world to also communicate in the game by allowing them to trade Pokémon or battle each other one-on-one. Applying this feature would compensate for the current weakness in the mechanics of the game. It will also make the game more interesting for the social player type.





In question 11, we looked at the game as an experiential system and concluded that the player's real world location plays an important role because the ability to meet other players in the real world is one of the biggest reasons why the game is fun/addictive. This feature is great in the summer, but it is unlikely that players will continue to stand at Poké Stops in the winter. A way to prevent this from happening would be to introduce Poké Centers at cafes in the real world, where players can battle one-on-one, heal their collected Pokémon, and possibly find new Pokémon to catch. This center also affords that social interaction in battles and trading can be made unavoidable. (Video mock up included in deliverables)

Finally, the game can also be improved by allowing players to train their Pokémon by spending time with them or with mini games. This will allow players to bond with their Pokémon, and as a result, bond with the game. This also increases the feeling of autonomy in the player as they can make a particular Pokémon of their choosing the strongest of their Pokémon. In the meanwhile the player is still triggered to catch other Pokémon of the same sort to speed up the process of making the Pokémon stronger.





REFERENCES

[1] Death By Nostalgia: a Diagnosis of Context-Specific Cases, <http://www.acrwebsite.org/search/view-conference-proceedings.aspx?Id=7580>, consulted September 26, 2016.

[2] Hunicke et al. (2004). MDA: A formal approach to game design and game research. In Proceedings of the AAAI Workshop on Challenges in Game AI (Vol. 4).

[3] Salen, K., & Zimmerman, E. (2004). Chapter 5: Systems. In: Rules of play: Game design fundamentals. MIT press.

Furthermore we used theories discussed in class during the 'programm your breakout course' 2015-2016 given by Erik van der Spek and the 'Design for game and play I' course 2016-2017 given by Erik van der Spek for answering question 7 and 11.

Thank you for reading!

