Requirements Ranking

Functional Requirements

For the implementation of upgradable powerups in the game, a few things have to be done beforehand. Firstly, there should be a way of getting coins so that better powerups can be bought. This is done by completing missions. Secondly, because getting upgrades costs a lot of time, Within these function requirements, four categories can be identifier using the MoSCoW model for prioritizing requirements:

Must Haves

- The player must have a rank
- There must be multiple ranks increasing in XP needed to have them
- The player must start with 0 XP and the lowest rank
- Every time the player dies, his score must be added to his XP
- Every time the XP is high enough to increase the next rank, the rank must be increased and the XP of the level must be subtracted from the total XP

Should Haves

- When a game mode isn't unlocked yet, it should have a different picture showing it
- When a game mode isn't unlocked yet, the player should not be able to open the game mode
- The current XP should be drawn at the menu
- The XP the player still needs to go to the next level should be drawn at the menu
- The rank should be drawn at the menu
- The rank should be saved to a file

Could Haves

- A popup appears when you rank increases
- A sound is played when your rank increases

Wont haves

- The sprite of the Doodle differs per rank
- The sounds the Doodle makes differs per rank

Non-functional Requirements

Besides the provided functionality and services, design constraints need to be included in the requirements specification as well:

- All new features will be implemented in Java 8
- All features will be implemented in the week of 10 October, 2016
- The implementation of the features shall have at least 75% of meaningful line test coverage (where meaningful means that the tests actually test the functionalities of the game and for example do not just execute the methods involved)
- No CheckStyle, PMD and FindBugs error will be present in the final version
- Every class, interface, enum, method and field shall be documentated using JavaDoc