HSGALAXY GAME by team Hais (Luong Dang Hai and Nguyen The Sang)

- Attached to this documentation is the Doxygen generated documentation which can be found and read under folder Documentations/html/index.html. The documentation of the program implementation can also be found in the source code.

- Basic features:

- User Interface (design and decide where the blocks are) - Done by Hai
- Statistics and StatisticsTest are implemented by Hai
- Galaxy is implemented by Hai and Sang.
- The game is able to restart a new game. This feature is implemented by Hai.
- Display star system information in the game. (both by hovering the star system image in the UI and displaying the name of the star system when player travels to that system). This feature is implemented by Hai.
- Transform coordinates of star systems and add them to the galaxy scene is implemented by Sang.
- Update the list widget of ships in a star system on click at a star system is implemented by Sang.
- "Save selected ships" button behavior is implemented by Sang.
- "Buy Health" button behavior and dialog are implemented by Sang.
- Update data to the UI when playing the game is implemented by Sang.
- NotEnoughHealthDialog, GameOverDialog, BuyHealthDialog, HighScoreDialog classes are implemented and designed by Sang.
- Together with those features, both of us also join the process of designing the logic and flow of the game, fixing bugs and crashes during the implementation of the program.

- Extra features:

- Integrating the student team's unit tests as a part of the CI environment. The tests are run as a part of CI (Done by Hai). It can be found on file .gitlab-ci.yml
- Own engine type and a ship that uses it. (Done by Hai). The ship that is using own engine type is the ship of the player. The implementation can be found on the file playership.h and playership.cpp.
- Scrollable map. The view of the game is scrollable. (Done by Sang). The implementation can be found in mainwindow.hh and mainwindow.cc.

- Top 10-list. (Done by Sang). The implementation can be found in mainwindow.hh, mainwindow.cc, highscoresdialog.hh and highscoresdialog.cc.

- Game functionality:

- In main.cc, the main window of the game is configured with suitable gameRunner, eventHandler and number of non-playable ships from configuration window.
- When game starts, player is at the center of the galaxy. Initially, player has 50 health and 10 credits
- Player then clicks on any star system to travel there and save available ships. User loses their health when travelling and also from saving ships. However, player receives credits and points.
- For each ship saved, credits of user increased by 5 + (health given)/2.
- For each ship saved, point increased by 1.
- Player can buy health later with earned credits with price: 5 credits/ 1 health.
- Player ends their turn by clicking "End turn" button, so the non-playable ships can make their moves.
- Game continues until player loses all health. Their point at this time is recorded.