## Don't Crash

### Air Traffic Controller Game



## User Manual

### Introduction

This manual aims to give a brief overview into what you can expect wen you begin playing **Don't Crash.** The game is based upon the role of an Air Traffic Control Officer (ATCO) where you are tasked with controlling multiple aircraft as they travel through your designated airspace.

The aim is the guide the aircraft through their assigned waypoints and out of their given exit point or to land at the Airport all while avoiding collisions with other aircraft.

The rest of this guide will explain the concepts, controls and features of the game. If you have any further questions, feedback or comments feel free to contact the development team below.

Thanks, and have fun!

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# Setup

#### Running the Game:

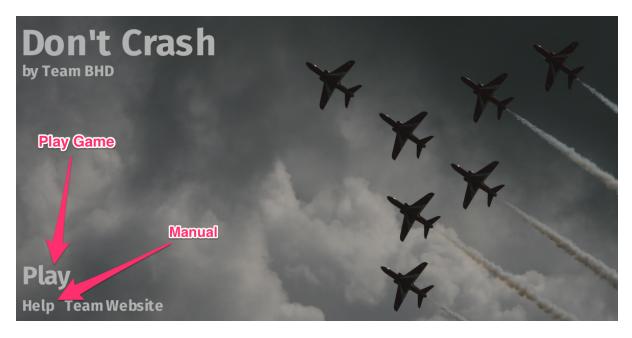
The easiest way to run the game is to simply open the bhdgame.jar file downloaded from our team website (http://teambhd.github.io/).

The simplest way to build and run the game from the source code is to use the Apache Ant Java build system, which is installed by default on the CS computers. The game can be launched by opening a terminal window in the project directory and then executing ant play, which will automatically build and run the game.

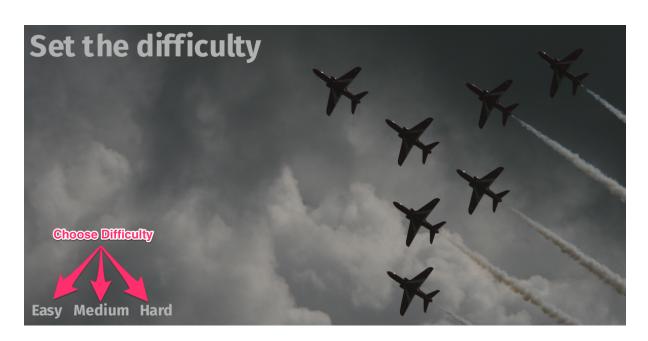
Alternatively, you can import the project into Eclipse: In the main menu go to File > Import... and in the dialog box that appears expand the "General" category and double-click "Existing Projects into Workspace". On the next screen click the Browse... button next to "Select root directory" and find the directory containing this Readme file. Then leave all the checkboxes in the bottom half of the dialogue unticked and click Finish. To run the game, select the top-level "Game" item in the Package Explorer on the left-hand side of the screen and then go to Run > Run Configurations.... In the window that appears, expand the "Java Application" item in the left-hand column and then double click on the "game" item beneath it.

# Menu Navigation

#### Main Menu:



### **Difficulty Selection Screen:**



### Interface Guide

The main game screen is divided into two primary sections, the airspace overview and the control hub. The airspace overview provides you with a top down perspective of all the aircraft, waypoints, airport and exit points you need to keep track of. The control panel gives a quick reference for various flight parameters such as heading, altitude, speed, Take Off and Landing.

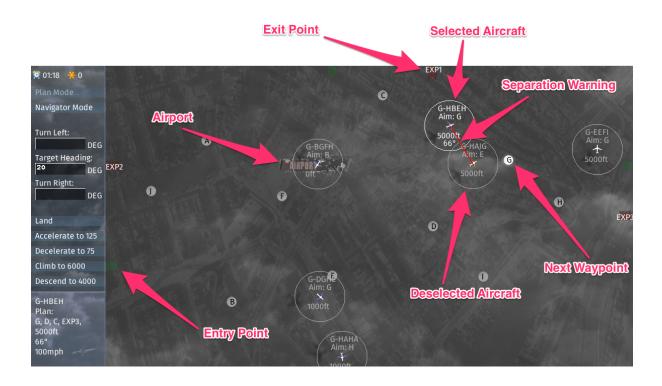
#### Main Game Screen:



# Airspace Overview

### **Navigator Mode:**

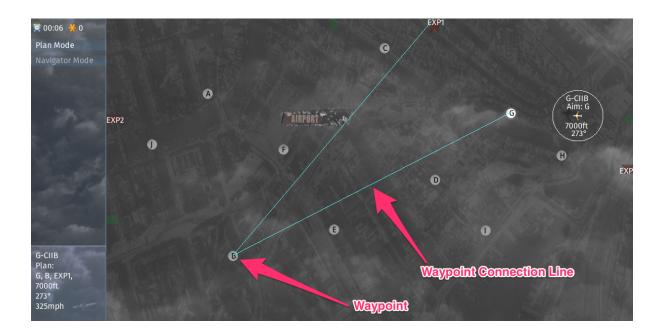
The Navigator mode is used for giving commands to flights in your airspace. Click on an unselected flight to select it, and then click and drag in it's control circle to give a new heading.



# Airspace Overview

#### Plan Mode:

Plan mode is used for re-assigning waypoints to the selected flight. You can click and drag on a waypoint to move the waypoint connection line to another waypoint. You can reassign any waypoint to other waypoint, but you cannot change the total number of waypoints for a flight.



### **Control Hub**



## Gameplay

### Scoring:

For each correct waypoint passed: 100

For terminating flight after completing the flightpath: 200

For terminating before completing the flightpath: -200

### **Controls**

#### Mouse:

Mouse 1 selects an on screen element, such as flight, text box or waypoint. Clicking and dragging with Mouse 1 allows you to move an element around the screen. When clicking on a waypoint it allows you to re-allocate to a new waypoint.

### **Keyboard:**

Up Arrow - Increase Altitude

Down Arrow - Decrease Altitude

P - Pause

# Glossary

- Airport A point where flights can land or takeoff on the airspace
- ▶ Airspace Overview Primary view to the right of the game screen
- ▶ **Altitude** Distance the flight is above the ground
- ► Control Circle Circle around a currently selected flight
- Control Hub Panel on the left of the main game screen
- ▶ Entry Point A point where flights will enter the airspace
- **Exit Point** The final objective of a selected flight
- Flight Any aircraft in the player's airspace
- Flight Plan The route through the airspace, including waypoints and exit points
- ▶ **Heading** Bearing between 0 360 that the flight is flying
- ▶ **Nav Mode** Used for controlling aircraft
- ▶ Plan Mode Used for adjusting flight's waypoints
- ▶ Text Box A control where you can precisely enter new values
- ▶ **Waypoint** A static point on the map, used for navigation

# Acknowledgements

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Some text from Team WAW's Assessment 2 manual has been used in this document.

The setup instructions, screenshots and general presentation are all new, and existing wording has been altered to take into account the addition of airport and scoring functionality.