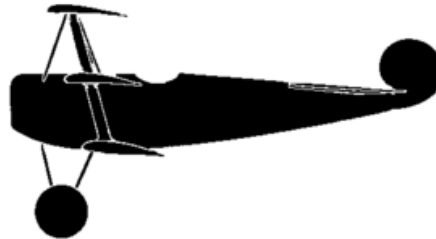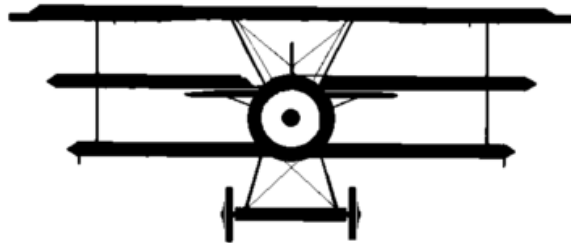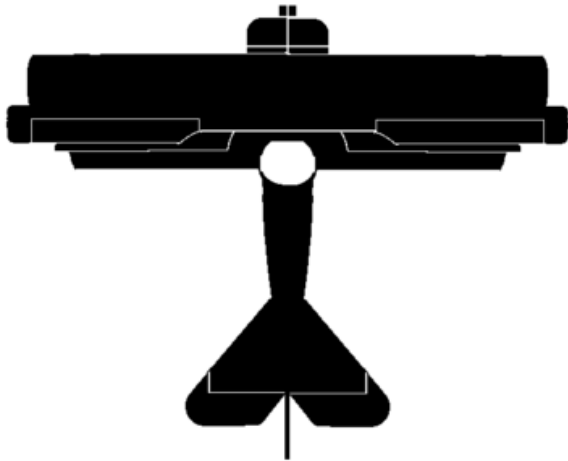# Flying Samurai – User manual

June 3, 2010

"A noble man amongst his army peers, acclaimed by fellow countrymen, hunter or hunted?"

Contents

1   Prolog

Welcome, dear pilots! Since our statistics department reports an expected survival rate of 14 days for student pilots like you, not much time can be wasted on preparations! Fasten your seat belts and maybe, just maybe, you'll live long enough to see another sunrise.

2   Disclaimer

This software is provided 'as-is', without any express or implied warranty. In no event will the authors be held liable for any damages arising from the use of this software.

3   Running the game

3.1   Hardware and software requirements

The game has been tested on Windows XP Professional 32-bit, Windows Vista 64-bit, and Windows 7 64-bit. It requires DirectX 9.0c February 2010 or newer (no, just any DirectX 9.0c is not enough!) and the .NET framework (just for the configuration dialog). Make sure you have the latest video card drivers, as older drivers really do cause trouble sometimes.

While the game will run on slower computers, the configuration below is our recommended configuration:

- **A multicore CPU @ 2.0 GHz** Yes, the game makes use of multiple cores (up to 4 actually); the faster your CPU, the better.

- **2 GB of RAM** The terrain takes a lot of memory!

- **nVidia 8600 GT or equivalent VGA (SM 3.0 support is necessary)** We've had some trouble on the nVidia 7xxx series, plus most of them are really not fast enough.

- **2 GB of free HDD space** A lot of terrain data needs a lot of hard-disk space!

- **Mouse and Keyboard** Or, if you have one, a joystick!

3.2   Installation

The installation of Flying Samurai is very simple. All that needs to be done is to unpack the contents of the `FlyingSamurai.zip` archive into any directory on your hard disk. You just need to be sure that you have writing rights into that directory (for example, on Windows Vista and Windows 7, the `Program Files/` directory does not allow any application to write into it, unless you enable the application to do so, and for this, you need administrator rights on that computer). This is necessary, because the game creates some temporary files, which are needed for its correct functioning.

The `FlyingSamurai.zip` archive contains a single directory, named '`Flying Samurai`'. This contains the `startup.exe` file, which launches the game. If you have trouble unpacking the archive, you can for example use the *7zip* application for this, which is attached in the `Misc/` directory (and is also available at `http://www.7-zip.org`).

3.3   Ready, steady, go!

Run the `startup.exe` file, and a configuration dialogue will appear. Here, you can choose your desired resolution, rendering device, whether you want vertical synchronization or not, whether the game should run in fullscreen, whether the sound should be on or off, and finally, level of anti-aliasing (higher numbers mean better image quality and slower rendering speeds).
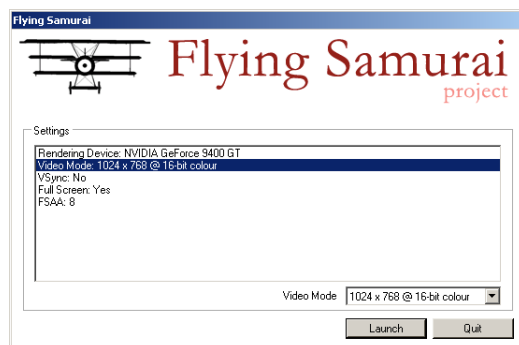

4   Controls

You can control the game using the keyboard, the mouse, or a joystick. If you own a joystick, skip to the next two sections. If you don't, here's a list of all the controls

Action	Mouse	Keyboard
Roll left	move mouse to the left	left arrow
Roll right	move mouse to the left	right arrow
Pitch up	move mouse backwards	down arrow
Pitch down	move mouse forward	up arrow
Yaw left	*N/A*	A
Yaw right	*N/A*	D
Turn engine off	*N/A*	P
Set throttle	*N/A*	keys $1, 2, \ldots, 0$
Increase throttle	mouse wheel up	numpad +
Decrease throttle	mouse wheel down	numpad -
Fire	left button	return
Freelook mode	right button	*N/A*
Aiming mode	*N/A*	space
Toggle map	*N/A*	F9
Change map scale	*N/A*	F8
Pause/Menu	*N/A*	escape

4.1   Changing input settings

When in the main menu, click on the "Options" button. The screen shown below will appear and allow you to invert the X and Y axes for the mouse and the X, Y, and Z axes (yaw, pitch, roll) for the joystick. For both mouse and joystick and for each axis, you can also change the sensitivity. Move the slider to the left

to decrease sensitivity, or move the slider to the right to increase sensitivity. Note that keyboard and mouse assignments cannot be configured.
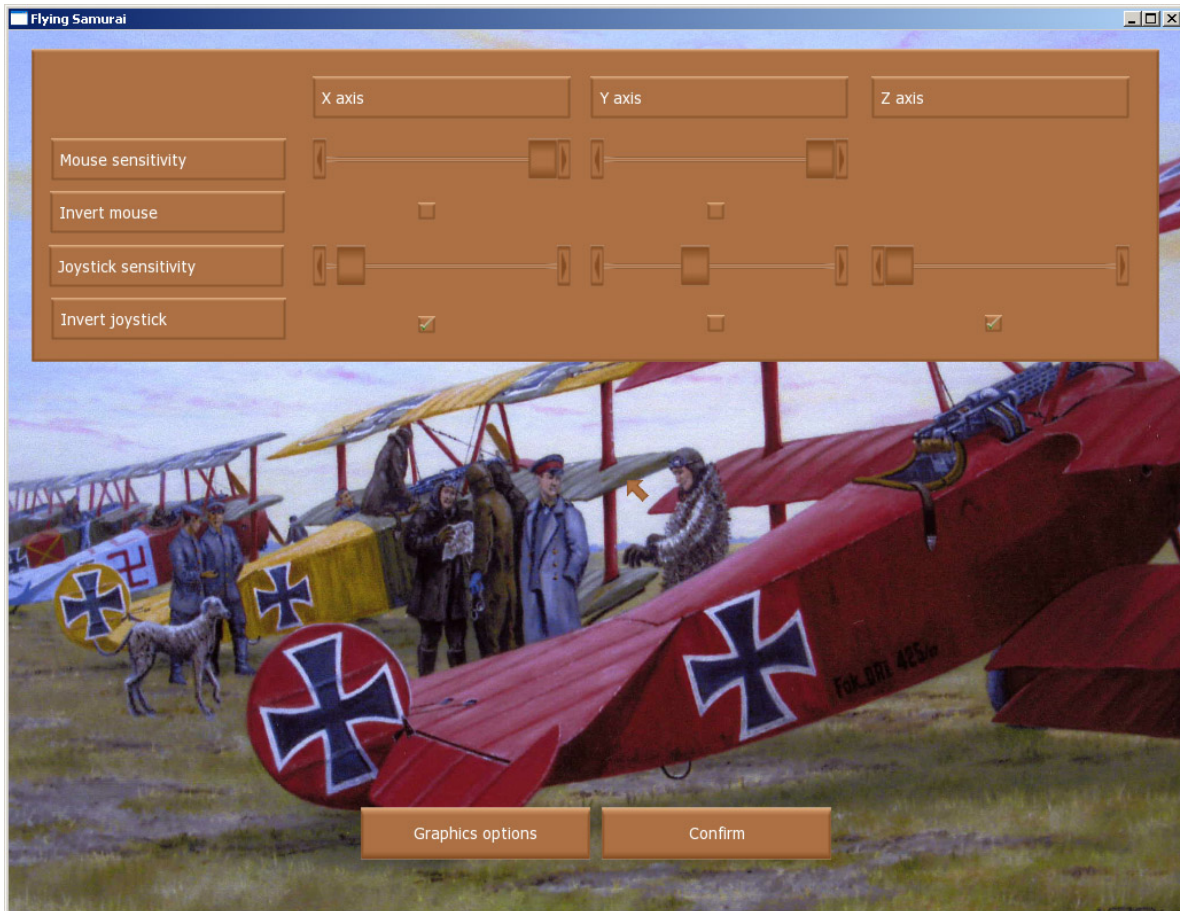
4.2 Tweaking the joystick settings

Not all of the game's configuration settings are changeable from the game itself. Edit the `input.cfg` file in the game's root directory to change joystick settings. The default `input.cfg` file looks something like this:

```xml
<?xml version="1.0" ?>
<Settings>
    <Setting Name="JoystickYawAxis" Type="UnsignedInt32" Value="2" />
    <Setting Name="JoystickPitchAxis" Type="UnsignedInt32" Value="0" />
    <Setting Name="JoystickRollAxis" Type="UnsignedInt32" Value="1" />
    <Setting Name="JoystickThrottleAxis" Type="UnsignedInt32" Value="3" />

    <Setting Name="JoystickFreeLookButton" Type="UnsignedInt32" Value="1" />
    <Setting Name="JoystickFireButton" Type="UnsignedInt32" Value="0" />
</Settings>
```

The `JoystickYawAxis`, `JoystickPitchAxis`, `JoystickRollAxis`, and `JoystickThrottleAxis` lines let you specify which axis (0 and 1 for two-axis joysticks, 0,1,2 for three-axis joysticks, and 0,1,2,3 for four-axis

joysticks). The `JoystickFreeLookButton` and `JoystickFireButton` lines allow you to specify the buttons used to trigger the two main actions – fire and free look. The main buttons usually have lower numbers, while the more obscure buttons usually have higher numbers. The accepted values are between zero and the number of buttons on your joystick −1. Joystick PoV caps and force-feedback are not supported.

5   The Menu
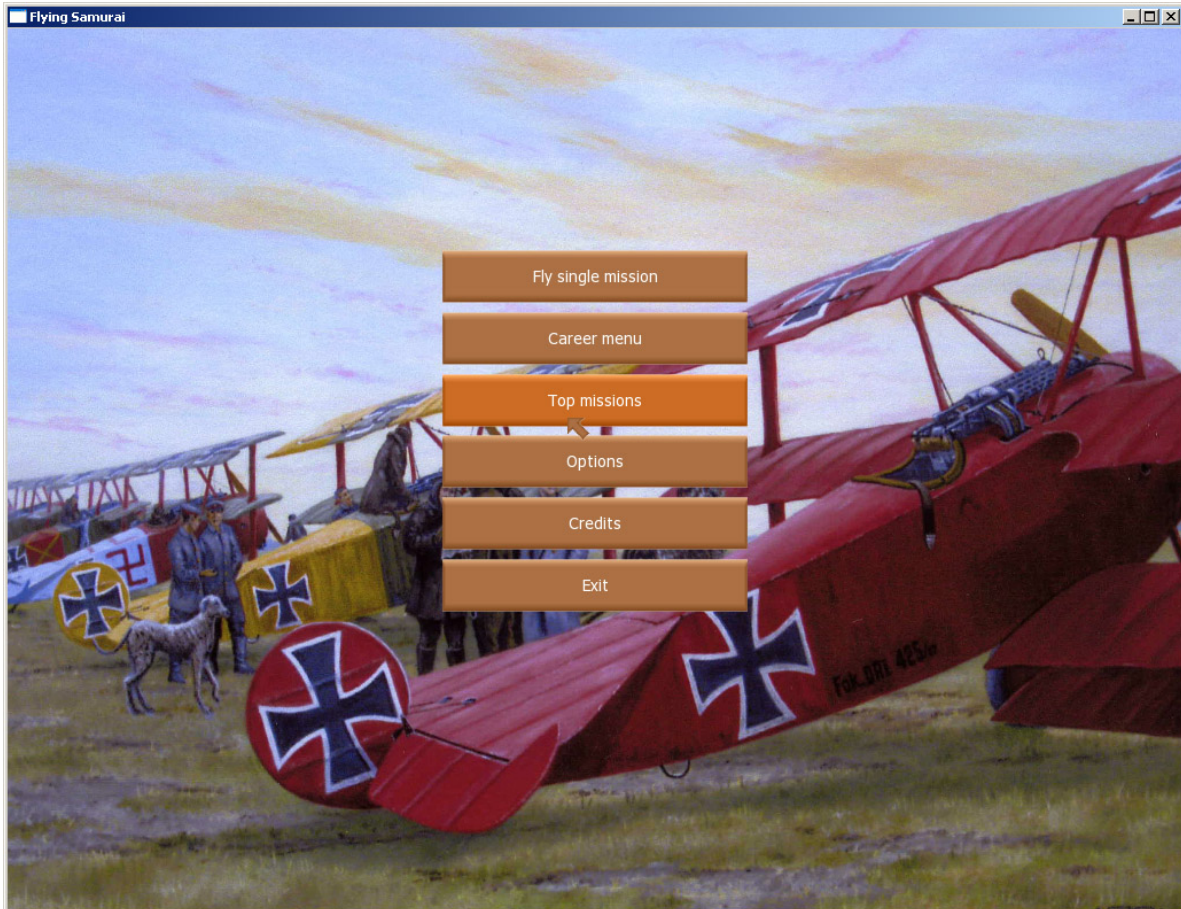
Navigating the menu is quite straightforward! To get to the single mission mode or the career mode, click the "Single mission" or "Career mode" buttons respectively. Alternatively, you can go check out the top scores under the "Top scores" button, change the settings (see the sections about Controls and Graphics for more detail!) with the "Options" button, learn a little bit more about the authors using the "Credits" button, or just go enjoy the real world with its real gore using the "Exit" button.

5.1   Tweaking the graphics

Click the "Options" button to get to the first options screen and then click the "Graphics options" button to change the graphics options. If you have a good graphics card and enough RAM, you might want to move the terrain quality, forest density, and vegetation distance slider all the way to the right side to increase the visual experience. Also, turn off the HDR – high dynamic range – and the physically accurate fog if you

don't like them or if you machine can't handle them. Some of the options marked with asterisk need restart of the game to take effect.
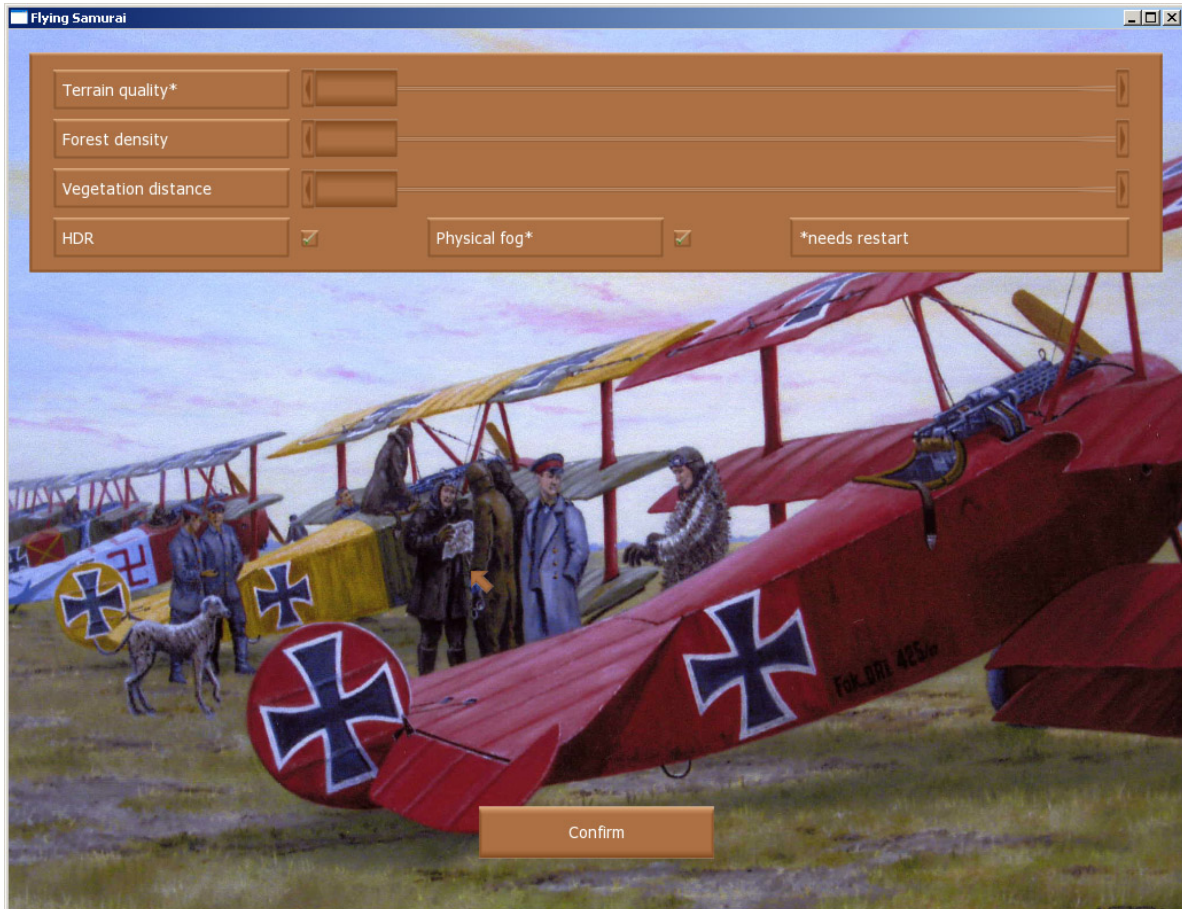
5.2   Realism panel

The realism panel lets you customize the game to your skills and tastes. Uncheck the "Midair collisions" checkbox if you have trouble avoiding crashing into other airplanes while flying. If you're not a really skilled marksman, you might want to disable the "Limited ammo" tick. Running out of fuel might be quite annoying, especially when there's no petrol station around – uncheck the "Limited fuel" checkbox. Also, you might become immune to the enemy's bullets (not the ground, though!) by unchecking the "Airplane can be damaged checkbox. Finally, for maximum realism, check the "Guns jams" checkbox that will block your gun when you just keep on shooting for long (be sure to check the `Entities.xml` file, where the gun's jam probability can be specified).
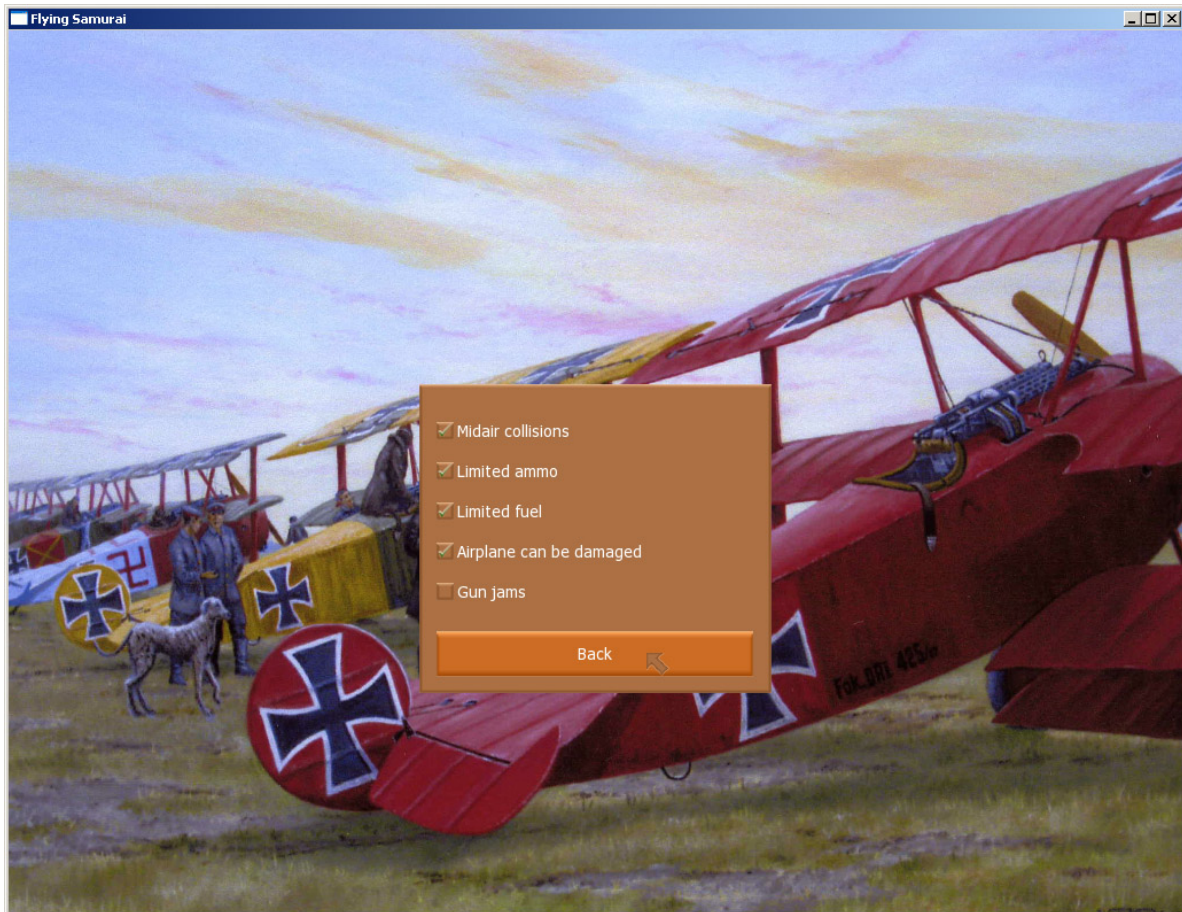
6 Single mission mode

If you just want to play a single mission, go to the single mission mode by pressing the "Single mission" button. Choose one of the mission types on the first screen, and the side you'll be flying for, the airplane you will fly in, and the size of your and your enemy's squadron in the next one. Also, you might want to change the realism settings in the realism panel (see below).

There are 5 types of mission available in the single mission mode:

- **Ace dogfight** Select a famous ace and challenge him to a duel! Kill the enemy ace to successfully end the mission.

- **Patrol the front** Fly along the front and patrol; there might be an enemy hoping to catch you unprepared. Shot down all enemy airplanes to successfully end the mission.

- **Bombarder escort** Your bombers are on their way to bomb an enemy factory; but they just might not make it without your help. Destroy all enemy fighters and keep at least one of your bombers alive to successfully end the mission.

- **Bombarder raid** You have reports of enemy bombers flying over the front to nuke your tank factories! If you don't stop them, who will? Destroy all enemy bombers to successfully end the mission.

- **Squadron dogfight** Challenge an enemy squadron to a dogfight! Destroy all enemy airplanes to successfully end the mission.

You can also aim using the `SPACE` key or look around using either your pre-configured joystick button or by holding the right mouse button.


6.1 HUD

On the HUD, you can see the height *above sea level*, the thrust, amount of fuel left, and approximate amount of ammo left. Also, if your guns jam, a red warning sign will appear.

Bring up (or close) the map using `F9` to take a look at where you're opponents are hiding! Switch the zoom levels using `F8` to get all your enemies on the map or to get a better idea of where you are. Your friends will always be blue, while your enemies will always be red. Two lines, again blue for you, and red for your enemy, show the paths that you should follow. The front line is yellow. Finally, the map is always centred around your airplane.
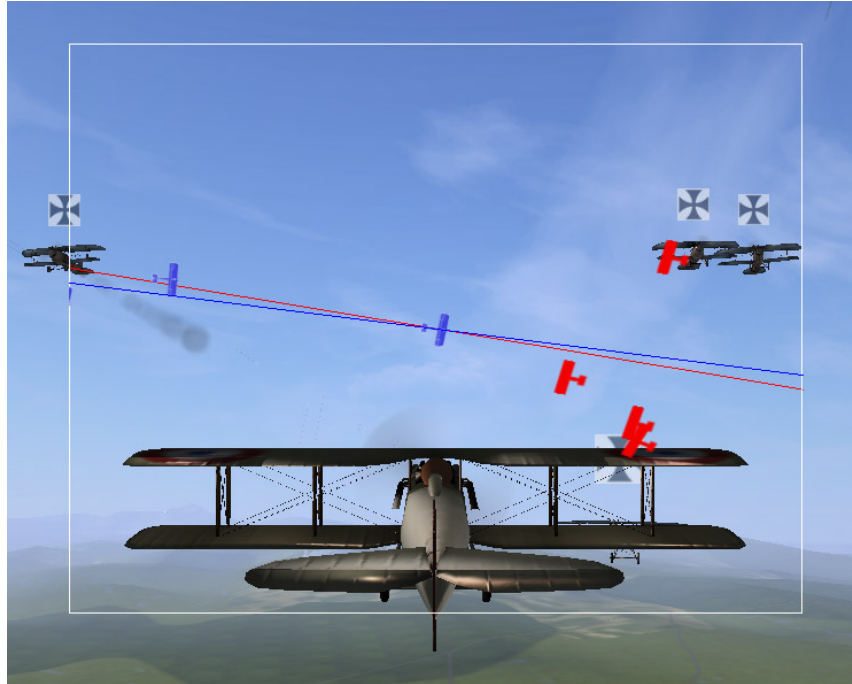
7 Career mode

You can get to the career mode menu by pressing the "Career mode" button in the main menu. The "Top careers" and "Back to main menu" buttons don't need much explaining, but the other two do.

7.1 Loading your career

The "Load career" will let you load a saved career (a career gets saved automatically when you leave it). If your game doesn't appear in the list of games that can be loaded, it's probably because you have modified the `Entities.xml` file, which could have caused inconsistencies in the save file, or because the career has already been finished.

7.2 Starting a new career

The "Start new career" button will show you a screen where you'll need to fill out your alias (or real name, if you want to!), choose your nationality (only nationalities that had some rather successful pilots are present, but feel free to add your own, see the Modifying the Game section. Lastly, select the year in which you want the career to start. The later in the war you start, the more advanced airplane you'll have at your disposal.

Next, you'll need to decide what level of realism you wish to play with (see Realism Panel above). Once you confirm, your career is ready.
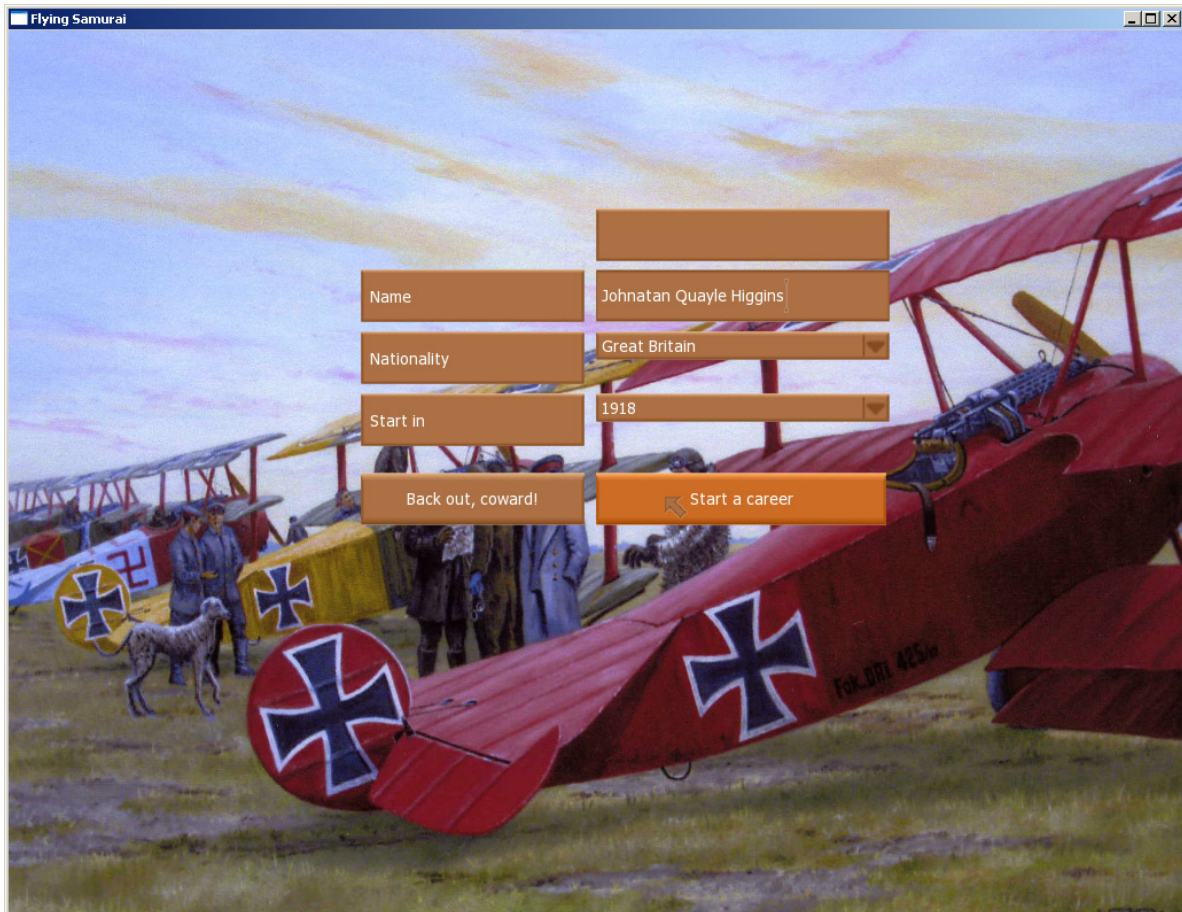
7.3 Career menu

In the career menu, you have a multitude of options. First, you can get out of the career by choosing "Save and exit" button, which will also save your career. If your rank is high enough, you might select a different airplane under "Select airplane".

Whatever your rank is, you can see who's who amongst the pilots by going to the squadron info screen; press the "Squadron info" button. On this screen, you can, if your rank is high enough, request transfer to another squadron. In the topmost widget, you can see what squadron you're currently assigned to. Finally, by pressing "Personal info", a screen with your detailed statistics, such as your rank, your awards, and the number of shotdowns, will be given.

7.4 Playing the career mode

After pressing the "Fly next mission" button, a briefing screen will appear. In contrast with the Single mission mode, most of the options will be disabled. That is because your rank is not high enough. Be sure to check out the mission type in the briefing screen's heading!

During a career mission, you will not be allowed to quit unless you're at least some 700 meters away from the closest enemy. Real men don't quit anyway! After each mission, you will see the missions statistics on the debriefing screen, read the news (if something interesting happened), and if the war ends, well... you'll see when you get there.

If your rank is not high enough to allow you to request a transfer, you will be the one who will have to accept transfers him/herself. This will give you a chance to gain experience from other pilots and see new places.

For a list of awards and ranks for each nation, take a look into the `Entities.xml` file.

8 Modifying the game

We hope you'll like the game. We hope you'll like the game enough to change it for the better. Even if you're not an able programmer, you might still help! Check the programming documentation (available at

our website, `http://tinyurl.com/flyingsamurai`), the Entities file section and the section Modelling and texturing conventions, and Adding new models into the game (all of them are in the appendix). Or, if you really want to be fancy, try the Terrain preparation workflow section! It will probably not be all that easy, but most of what you need to know is documented and we've tried to make the game as modder friendly as possible.