FLYBOOK
WEB APPLICATION
FOR PILOTS LOGBOOK

USER'S GUIDE 1.0

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Version experimental

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1. OVERVIEW

Flybook web application is aimed for pilots flying with small aircrafts. They may own the planes theirselves or they are only flying with them. Eitherway in this application pilots can file their individual flights as a logbook.

Users must do login to the Flybook application and entering for the first time, they must do the registration.

Each flight will get an id and there will be information about pilot, departure time and departing airport, landing time and landing airport and few other things will be filed into logbook. Pilot can only add information about own flights. Also updating and deleting a flight from database can be done only for pilot's own flights. Reading and searching flights made by other pilots is ok.

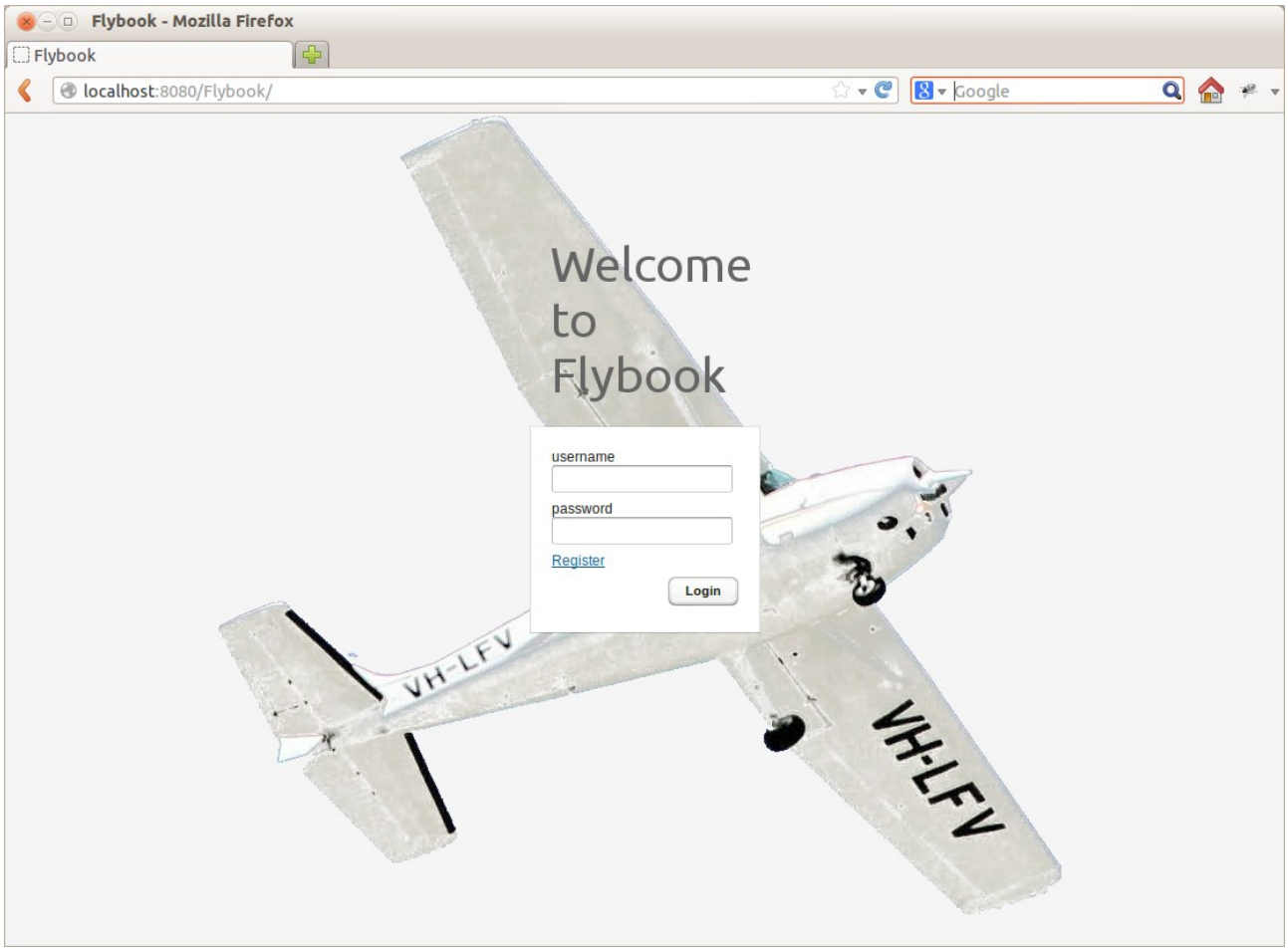
Owner of an aircraft must register the basic information like registration number, make and model of the aircraft, owner's address and few other things. Aircraft information can be searched and red by Flybook users.

Flybook application use International Civil Aviation Organization's (ICAO) airport coding system and it's database for airports as a basic airport database. Airport information can be read inside application and to visualize individual flights user can see with google maps the flight route from departure airport (city) to landing airport (city).

As Flybook application is in experimental level, several details are still under consideration whether those are needed or not. Basicly with the present version all the necessary information and actions can be done. Major decision will be preventing to delete flight information and aircrats. By this way logbook would be basic database to look back pilot's and aircrat's flight history from several years, if the logbook will be used permanently.

2. REGISTRATION AND LOGIN

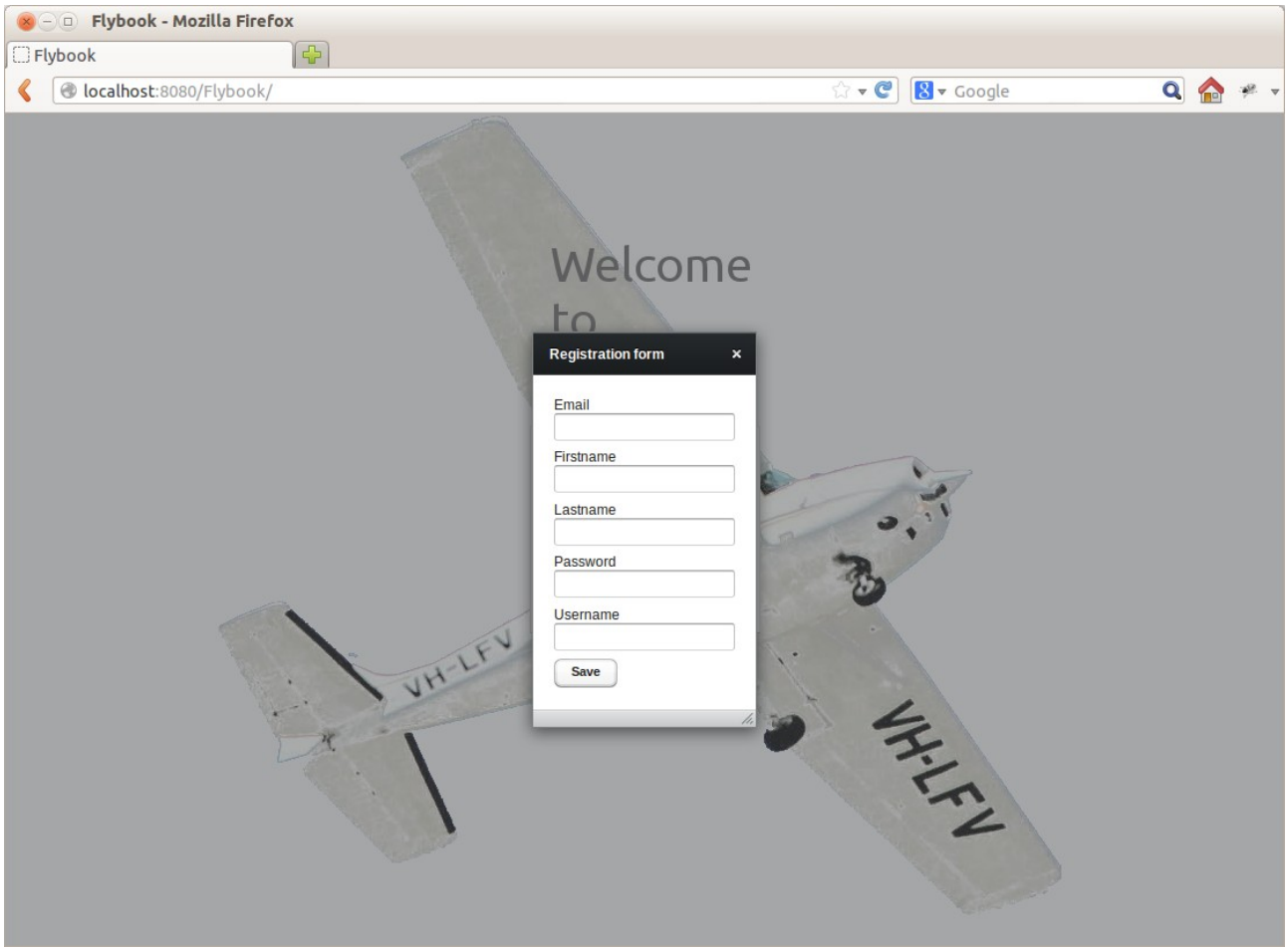
2.1 Login



Picture 1. Login view

Flybook application starts with login view (picture 1) and if user is here for the first time the register-link will be used for doing the registration of new user.

2.2. Registration



Picture 2. Registration form

When pilot (user) for the first time enter to Flybook application the normal login view is shown and by clicking the the registration in login view, user will see the registration form (picture 2) and fill it.

2.3 User information

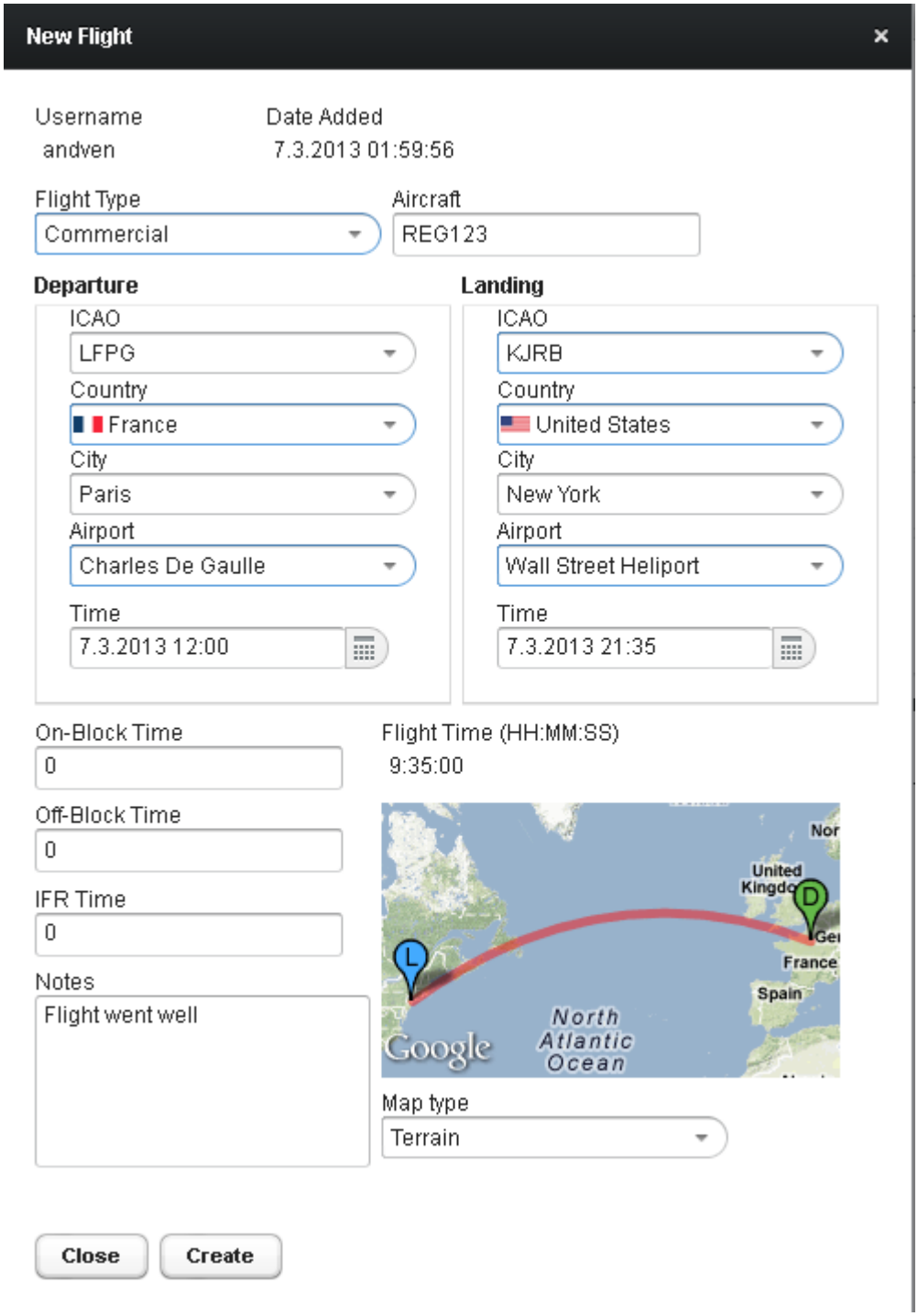
At this point the user information is quite simple. Only email, firstname, lastname, password and username are given. For given information there is no particular restrictions.

3. FLIGHTS INFORMATION

3.1 General

Fligths view is the main view in Flybook application. In flights view table data can be scrolled and when highlighted a row it will shown in the rightside view, where information can be updated. Flight view is made as tablesheet, so also Airports view and Aircraft view will be opened here.

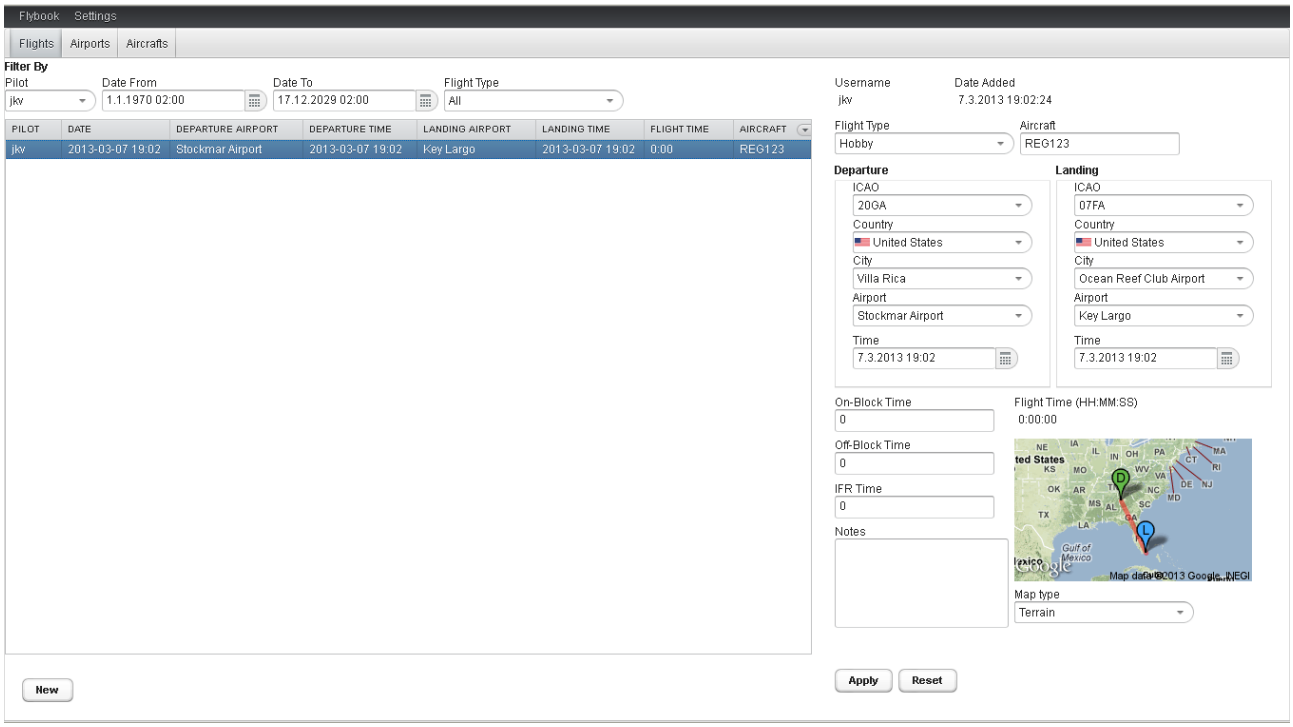
3.2 Adding new flight



Picture 3. Adding new flight

When selecting ”Add” button in flight view, new window will open and adding a new flight can be done (picture 3). This view also shows the flight route in google maps.

3.3 Searching flights



Picture 4. Flights view and searching flights

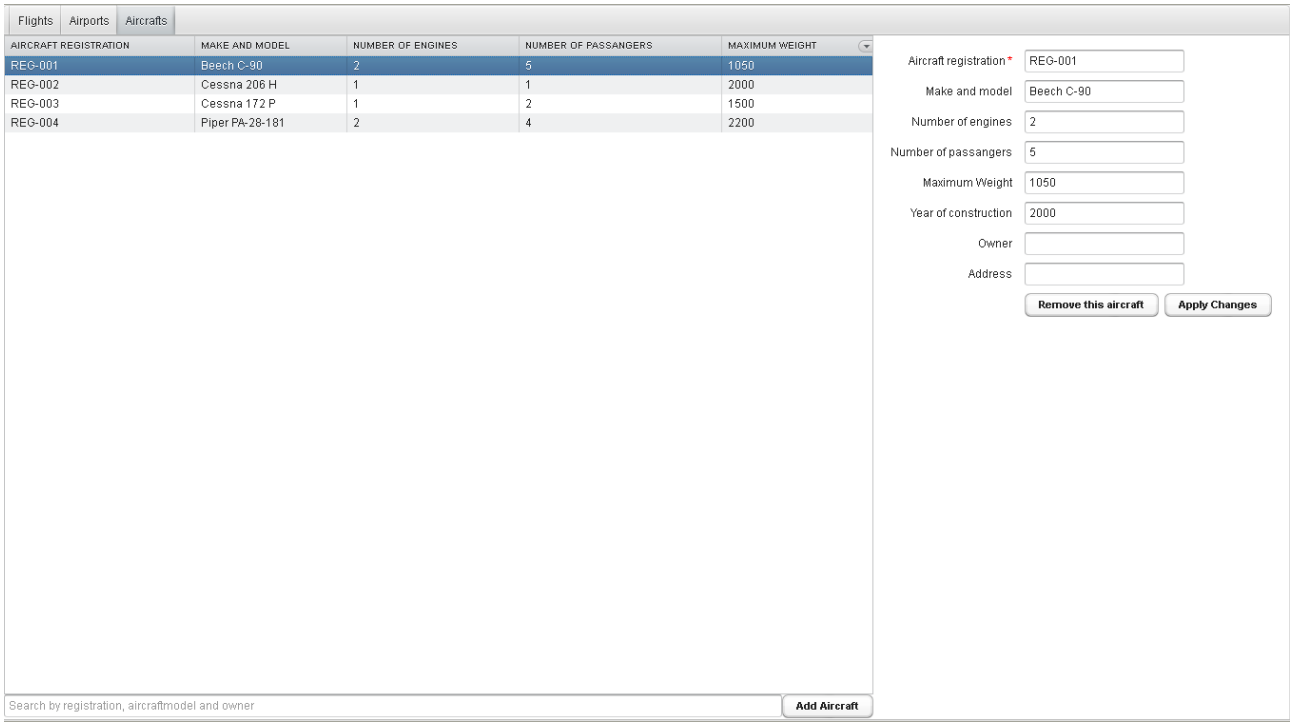
Searching flights can be done by pilot, dates and flight type. Date search can be done from particular date to another date. When selecting a row, it will be shown in rightside view.

4. AIRCRAFTS INFORMATION

4.1 General use

Aircraft information is basicly background data, but it is necessary, as this application is about flying aircrafts. And of course the basic aircraft data is important itself.

4.2 Aircraft information



Picture 5. Aircraft view

Aircraft view (picture 5) is a splitted window. On the leftside is the main view, where all the aircraft information is given and can scrolled down. Aircraft registration number is id for this data. At the bottom of the leftside window open word/number search can be done by registration number, aircraft make/model name and owner's name. Also adding a new aircraft will be started at bottom from button ”Add Aircraft”

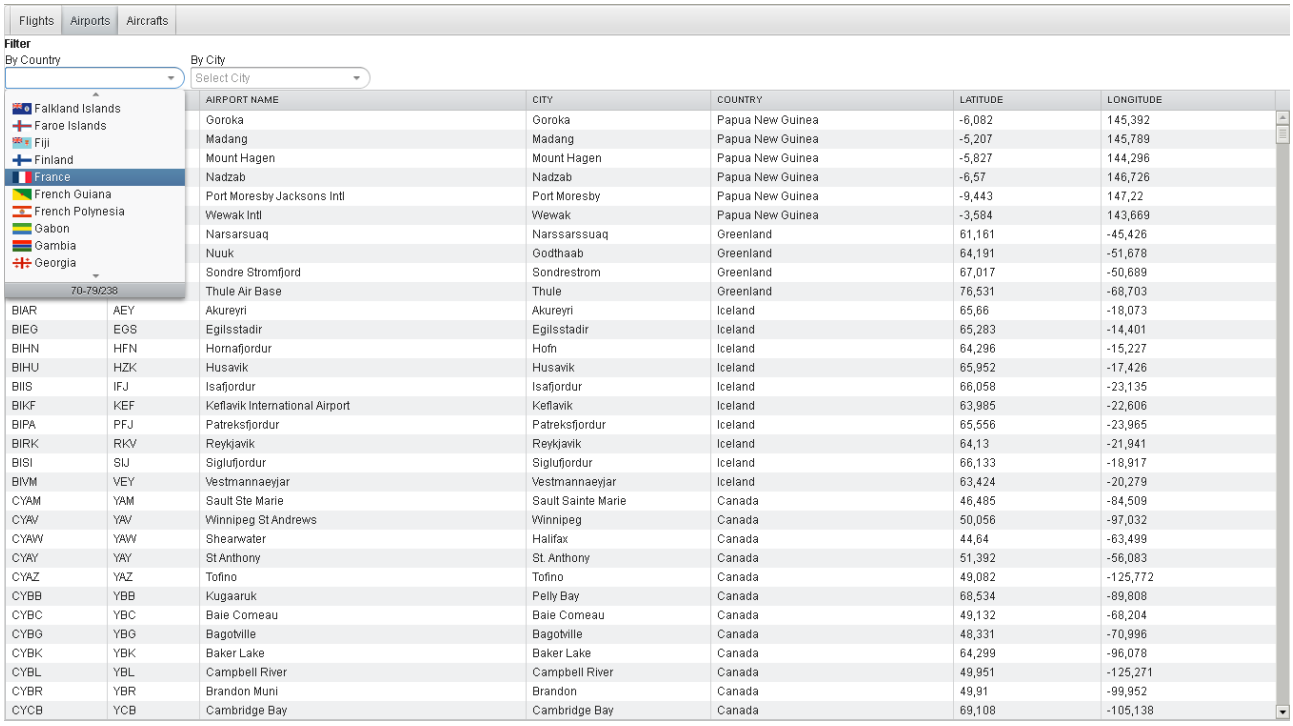
The rightside window will open when adding is started or some aircraft is picked (highlighted row) for updating. New data is given and ”Apply changes” button will add a new aircraft or change data of existing aircraft. Button ”Remove This Aircraft” will permanently move that particular aircraft from database.

5. AIRPORTS INFORMATION

5.1 General

Airports data for Flybook application is directly from ICAO database and is used as is and also updated directly from their database. So basicly this data covers all the airports in the world

5.2 Airports information



Picture 6. Airports view

Airport view (picture 6) shows all the information that is filed in ICAO database. The official airport ICAO code is used as id for this data. Airports data can be searched by country and city, and this view can be scrolled. Because data is formed from ICAO database, there is no updating nor adding nor removing options available.

6. SPECIAL MATTERS TO CONCERN

6.1 General

Flybook application uses SQL database, to be exact SQLite database. It has 4 tables; Users, Aircrafts, Airports and Flights.

6.2 About Flybook Application

Flybook application has been made in Turku University as group assigment for Vaadin course. Main purpose was to learn how to use Vaadin tools as a web application development framework.

Because of this most of time in groupwork has been spent learning what kind of tools there is, what can done with them and how to get them working together. All this of course has been connected to what group members know about java language beforehand.

If the odds would have been better and more time spent on application itself, most likely there would be more fuctionality and details.

Different Flybook application parts has done by as following.

Mats Rauhala: Repository management, LoginView, Authentication

Esa Halsti: LoginView, RegisterView, Menu, User Settings

Markku Liljeroos: AircraftView, User Guide

Janne Virtanen: FlightsView, AirportsView