



The Flying Samurai project



Team: Jan Beneš, Oskár Elek, Marek Hanes, Ján Zahornadský
Supervisor: Otakar Nieder



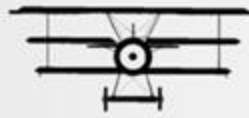


- Genre and theme



Introduction

Flying
Samurai

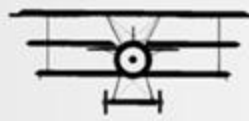


- Genre and theme
- Design premise



Introduction

Flying
Samurai

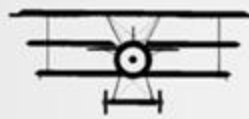


- Genre and theme
- Design premise
- Platform



Introduction

Flying
Samurai

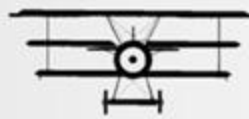


- Genre and theme
- Design premise
- Platform
- Externs



Introduction

Flying
Samurai



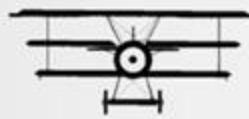
- Genre and theme
- Design premise
- Platform
- Externs
- Similar projects
 - Red Baron II/3D



From Red Baron II

Introduction

Flying
Samurai



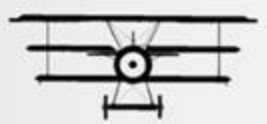
- Genre and theme
- Design premise
- Platform
- Externs
- Similar projects
 - Red Baron II/3D
 - Over Flanders Fields



From Over Flanders Fields

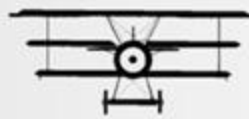


- Flying Samurai:
 - Core
 - Physics
 - Graphics
 - AI (Artificial Intelligence)
 - Game logic (content)
 - Management



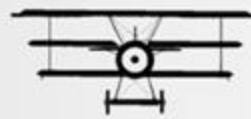
- Marek Hanes
- Major aspects:
 - Threading (4 threads - main, graphics, physics, AI)

Flying Samurai



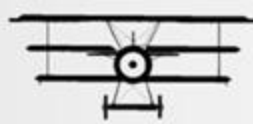
- Marek Hanes
- Major aspects:
 - Threading (4 threads - main, graphics, physics, AI)
 - Reader-writer

Flying Samurai

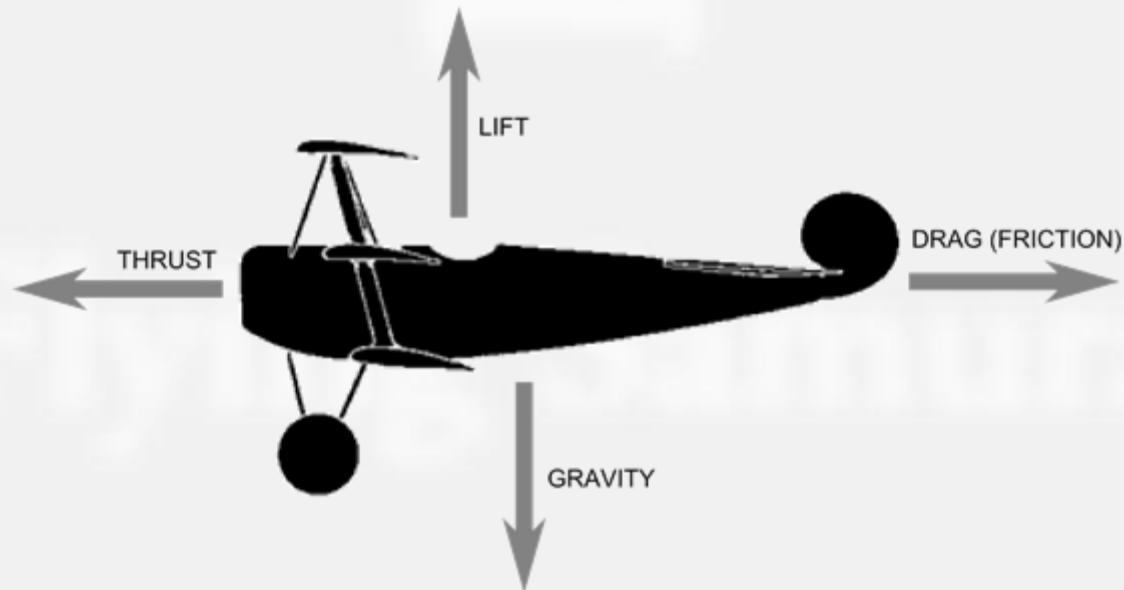


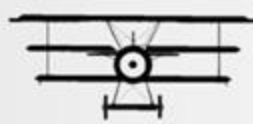
- Marek Hanes
- Major aspects:
 - Threading (4 threads - main, graphics, physics, AI)
 - Reader-writer
 - Services

Flying Samurai

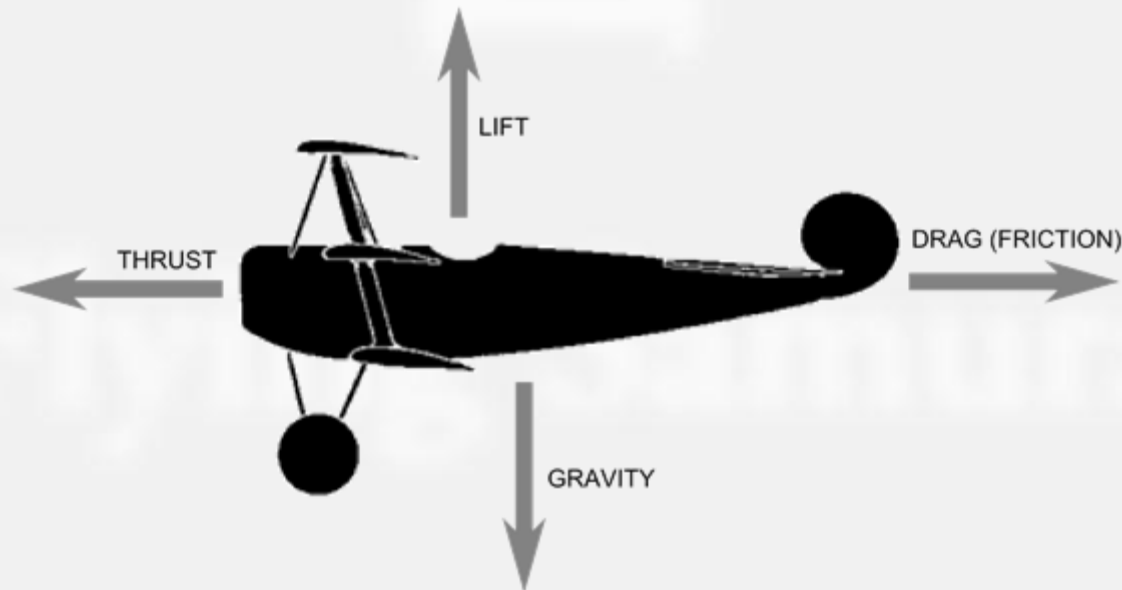


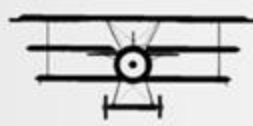
- Ján Zahornadský
- Major aspects:
 - Flight model





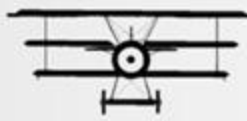
- Ján Zahornadský
- Major aspects:
 - Flight model
 - Collision detection (Bullet) & handling



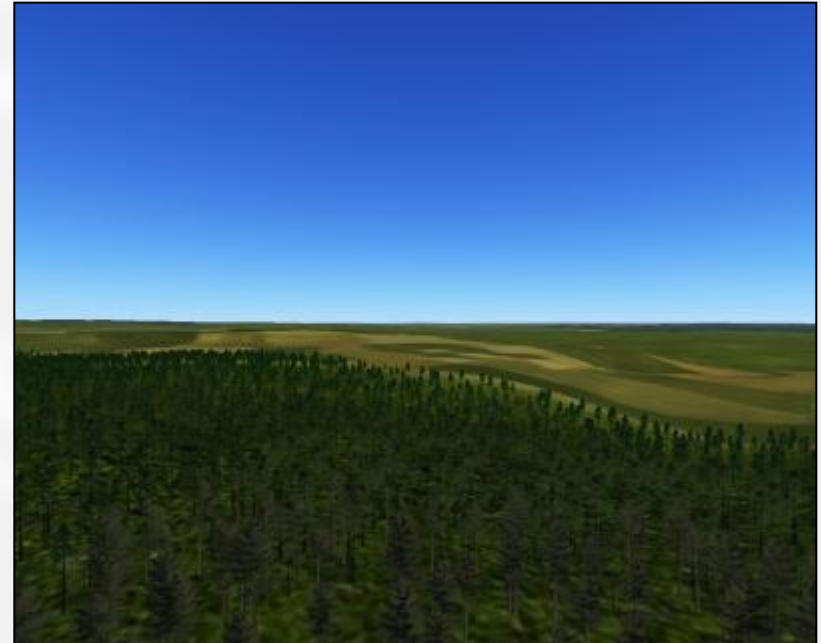
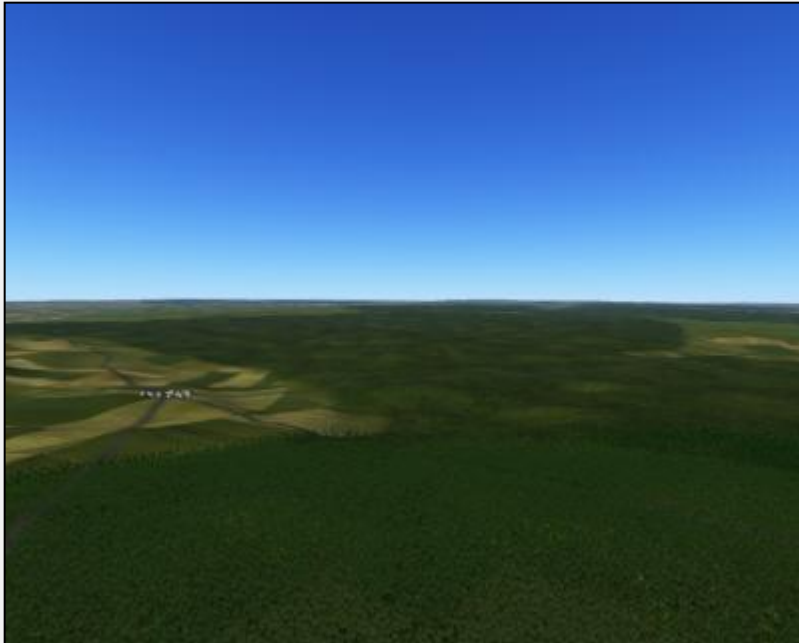


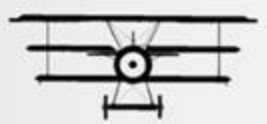
- Oskár Elek
- Major features:
 - Airplanes



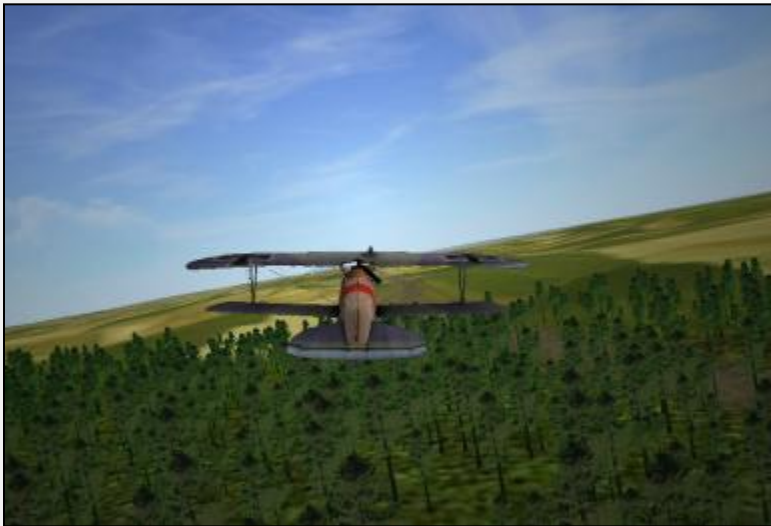


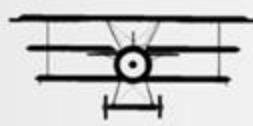
- Oskár Elek
- Major features:
 - Airplanes
 - Huge terrain ($\sim 210000 \text{ km}^2$)





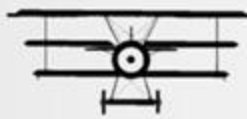
- Oskár Elek
- Major features:
 - Airplanes
 - Huge terrain ($\sim 210000 \text{ km}^2$)
 - Static geometry



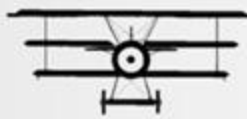


- Oskár Elek
- Major features:
 - Airplanes
 - Huge terrain (~210000 km²)
 - Static geometry
 - Post-processing effects

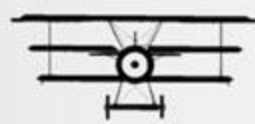




- Oskár Elek
- Major features:
 - Airplanes
 - Huge terrain ($\sim 210000 \text{ km}^2$)
 - Static geometry
 - Post-processing effects
 - Configurability

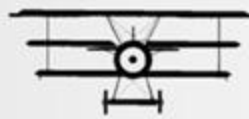


- Oskár Elek
- Major features:
 - Airplanes
 - Huge terrain ($\sim 210000 \text{ km}^2$)
 - Static geometry
 - Post-processing effects
 - Configurability
 - Ogre 3D

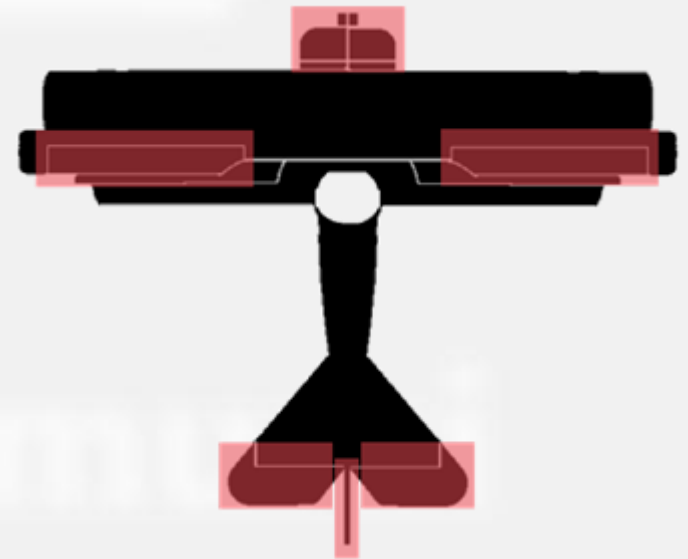


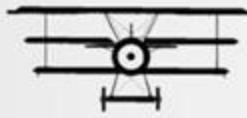
- Ján Zahornadský
- Major features:
 - Navigation and high-level decisions (Opensteer)





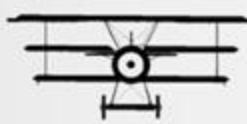
- Ján Zahornadský
- Major features:
 - Navigation and high-level decisions (Opensteer)
 - Airplane control
 - Inverse physics
 - Neural network + heuristics





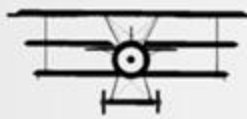
- Jan Beneš
- Major features:
 - Single missions (Ace Dogfight, Bomber Escort, etc.)

Flying Samurai



- Jan Beneš
- Major features:
 - Single missions (Ace Dogfight, Bomber Escort, etc.)
 - Campaign
 - Missions
 - Temporal development
 - Ranks and awards
 - Configurable

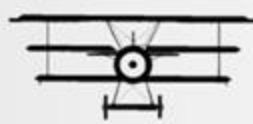


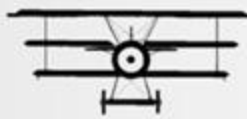


- Jan Beneš and Oskár Elek
- Major aspects:
 - Team coordination
 - Externs

Video

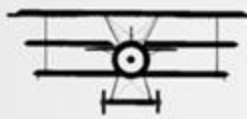
Flying
Samurai





- Project summary:
 - Goals accomplishment
 - Size – 70 kSLOC + libraries
 - Evaluation

Flying Samurai



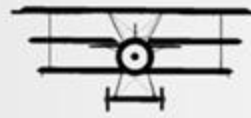
- Project summary:
 - Goals accomplishment
 - Size – 70 kSLOC + libraries
 - Evaluation

- Acknowledgements

Otakar Nieder, externs, authors of libraries,
Alexander Wilkie, Tomáš Holan, ...

Demonstration

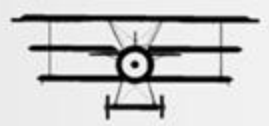
Flying
Samurai



Flying Samurai

End

Flying
Samurai



Thanks!
Questions?

Flying Samurai