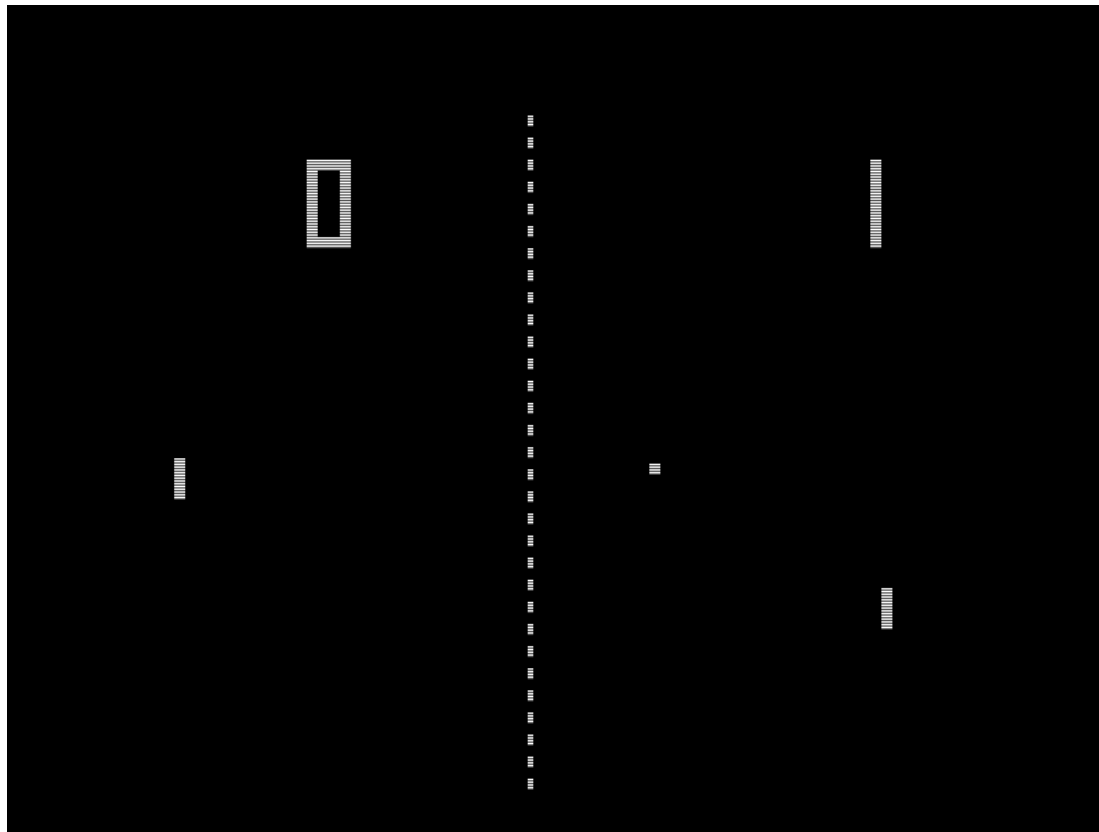# Application Development for Mobile and Ubiquitous Computing

Seminar Task
First Presentation

GroupNo. 15
Team: Philipp Sonnefeld
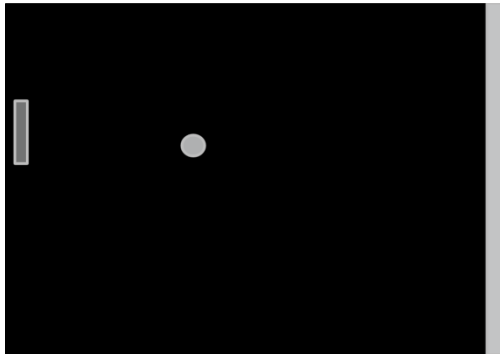Sergey Chuykov

- PONG

- PONG

[wikipedia]

- ## PONG

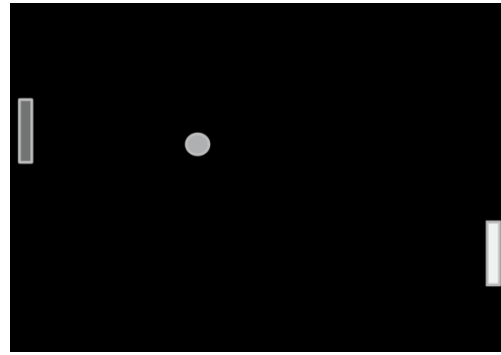 - http://en.wikipedia.org/wiki/Category:Pong_variations

- Variations in game design – basic principles:

  - Number of Opponents

  - Type of Opponent

  - Type of Connection

  - Team size

- Variations in game design – basic principles:

  - Number of Opponents

  - Type of Opponent

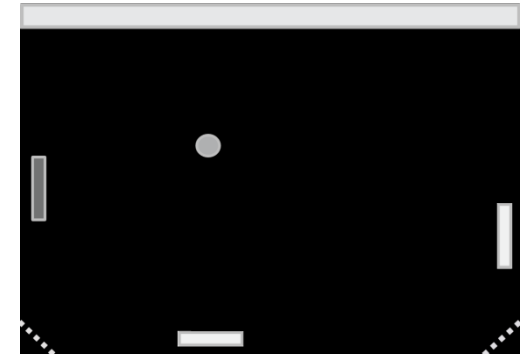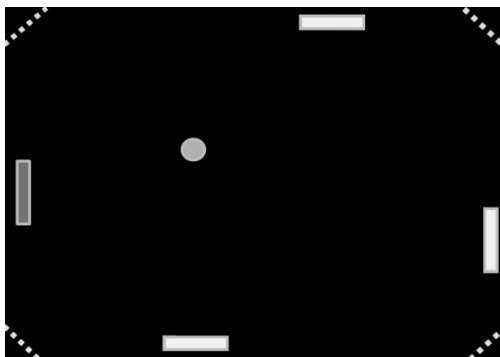 - Type of Connection

  - Team size

- Number of Opponents

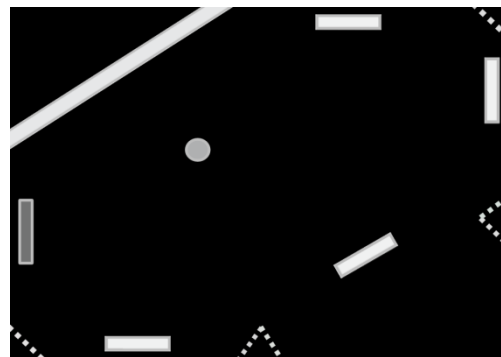0 – „squash-mode"   1   2

3   4

...

Sergey Chuykov & Philipp Sonnefeld
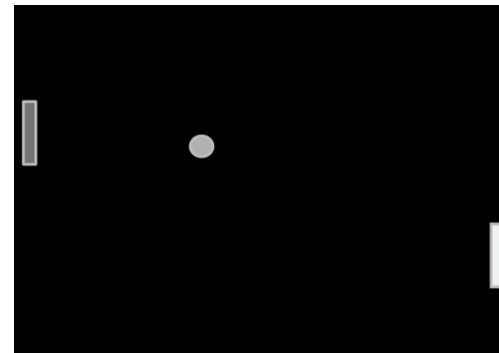
- Variations in game design – basic principles:

  - Number of Opponents

  - Type of Opponent

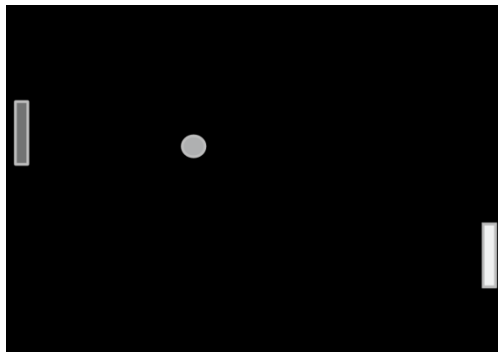 - Type of Connection

  - Team size

- Type of Opponent

- Variations in game design – basic principles:

  - Number of Opponents

  - Type of Opponent

  - Type of Connection

  - Team size

- Type of Connection

- Variations in game design – basic principles:

  - Number of Opponents

  - Type of Opponent

  - Type of Connection

  - Team size

• Team size

2 vs. 2

deathmatch*

* every game needs a deathmatch mode

- Variations in game design – basic principles:

  - Number of Opponents:

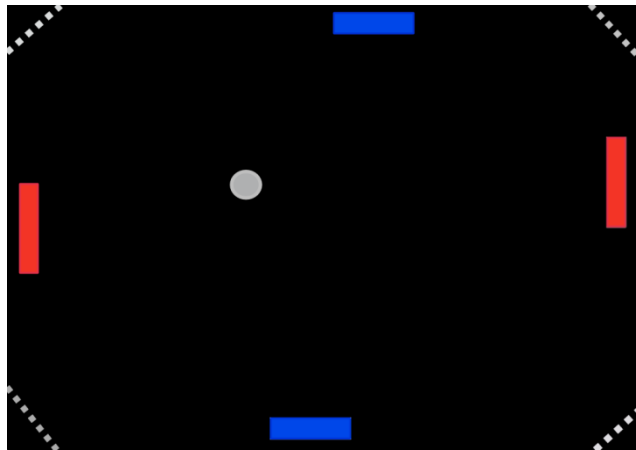 - Type of Opponent:
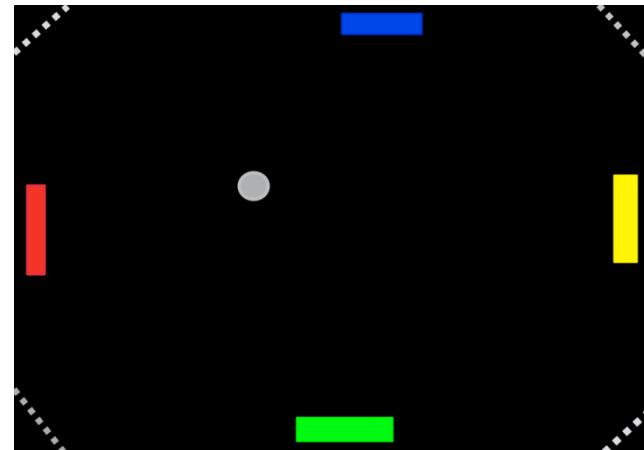
  - Type of Connection:

  - Team size:

- Variations in game design – basic principles:

  - Number of Opponents: 2-4 total

  - Type of Opponent:

  - Type of Connection:

  - Team size:

- Variations in game design – basic principles:

  - Number of Opponents: 2-4 total

  - Type of Opponent: human

  - Type of Connection:

  - Team size:

- Variations in game design – basic principles:

  - Number of Opponents: 2-4 total

  - Type of Opponent: human

  - Type of Connection: WWW / local WiFi

  - Team size:

- Variations in game design – basic principles:

  - Number of Opponents: 2-4 total

  - Type of Opponent: human

  - Type of Connection: WWW / local WiFi

  - Team size: deathmatch!

- **Used Technologies (quick overview)**

Cocos2D

iOS SDK   GameKit   Objective-C
(Xcode)

iOS
(Device, Simulator)

- **Challenges we face:**

  - real-time synchronization between 2+ devices

  - game hosting / discovery / matchmaking

  - stable connection

  - adaptation of game state and UI between heterogeneous devices (iDevice family)

  - UI design for quick reaction: small screens

- The road ahead:

  - UML design (use cases, class hierarchy)

  - learning the technology (tutorials, samples)

  - learning & using the tools (XCode 4) to implement prototypes

  - testing: regression tests, automated GUI tests, manual tests on real devices

- Thank you and good luck with your projects.