iSnake
Intelligent Multiplayer Snake
What is iSnake?

- is the variant of snake game popular among cell phone users
Features of iSnake

- Multi player feature
- Computer controlled intelligent opponents
Multiplayer

local player

Client App.

Game Server

network

Client App.

remote player 1

Client App.

remote player N
iSnake Client App.
Features of iSnake

✔ Multi player feature

- Computer controlled intelligent opponents
Intelligent Opponents

- Two path finding algorithms have been developed:
  - Blackmamba
  - Viper

- The Input Handler of iSnake Client Application is replaced by the module implementing Blackmamba or Viper
Intelligent Opponents

- Encoder / Decoder
- Client Net. Interface
- Game Field Matrix
- Game Controller
- Game UI
- Game Field Canvas
- Blackmamba or Viper

Network Layer
Intelligent Opponents

Turn Around Time

Turn Around time (ms)

(Source,Target) coordinate pair id
Intelligent Opponents

Path Length

(Source, Target) coordinate pair id
Features of iSnake

✔ Multi player feature

✔ Computer controlled intelligent opponents
Game Server Manager

website visitor

request http://isnake.sf.net

join existing game server

display web site

start Java Web Start App. that connects to specified game server

add new entry to gameservers.xml

probe each entry in gameservers.xml and update if req.

start Java Web Start App. that connects to newly created game server

host new game server
Documentation

• Source code contains full code documentation conforming to Javadoc standards.

• Both path finding algorithms have been fully documented with illustrations.

• The protocol devised for communication between game server and clients has also been documented.

• All documents available at iSnake's Doc. Repo. http://isnake.sf.net/docs
Project Management

- iSnake code managed using subversion – a version control system
- Collaboration on project docs (prototype design, project plan, TODO list, etc) done using WIKI
- Junit tests were developed to test modules before integration
- All the project management resources were provided by sourceforge.
Why Snake game?

Simplicity !
http://isnake.sourceforge.net

Thank You