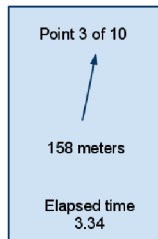


## Treasure Hunt

The participant navigates through a series of points until he/she reaches the treasure.

- For each point there can be some sort of task e.g. solve an equation, answer a question...
- When a point have been reached and the task completed the next point is revealed and tracked on the phone, e.g. 200 m to the north.
- The time used to find points and solve tasks is used to calculate a score.
- Additionally it must be possible to create a "treasure hunt" by visiting points and defining tasks.



1

## Additional additional

### Requirements

- Some Graphics
- GPS
- Compas

### Optional

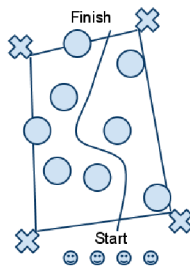
- Online sharing of treasure hunts.
- Multiple players each with a phone.
- Point location leads for higher difficulty.
- Use the movement sensor for a task.

2

## Avoid the Traps

The players must observe each other and use their memory in order to navigate a playing field filled with traps.

- Four corners of the playing field are marked and recorded with a phone.
- The phone app places hidden traps in the playing field at random.
- The participants must try to reach the finish one at a time without hitting any traps.
- If they hit a trap the next participant the turn is passed to the next participants.
- Each participants gets a score based on the percentage of the course traversed.



3

## Additional additional

### Requirements

- Some Graphics
- Sound
- GPS

### Optional

- Each participants has a one time possibility to disarm all traps in an area.
- Multiple players each with a phone. Requires distribution of the location of the traps.
- Reduce the score for each participants based on the time he/she used to traverse the course.

4

## Distributed walkie-talkie system

In catastrophe areas the parts cellular infrastructure may be damage and therefore non-functional. This project proposes the use of the mobile phone to for a distributed walkie-talkie system. The system should allow audio clips to be transferred.

Possible topics include:

- Service discovery
- Ad-hoc networking
- Peer-to-peer communication
- Content aggregation
- Routing
- Multi-hop
- Audio recording/playback



5

## Network PONG

Pong (marketed as PONG) is one of the earliest arcade video games, and is a tennis sports game featuring simple two-dimensional graphics. While other arcade video games such as Computer Space came before it, Pong was one of the first video games to reach mainstream popularity.

[<http://en.wikipedia.org/wiki/Pong>]

Develop a network version of pong running on multiple mobile devices. With the ability to challenge and compete against your friends.

- Multi-player PONG
- Service discovery
- Ad-hoc networking
- Peer-to-peer communication
- Real-time communication
- Sensor input - for controlling the paddle

