Group 3 - Game Design Document and Prototype

Christos Ioannidis, Ludwig Leuschner, Pio Chibuzor Okongwu

Otto-Friedrich University of Bamberg

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Game Design Summary

- Beat opponent's or own score
- Reach a (self-chosen) goal along a calculated path
- Number of minimum rounds can be selected
- Move by accurately guessing distances to ≥ 4 landmarks around current position
- Acquaint yourself with your surroundings and where important landmarks are

Players and Organizers

- Anyone with an Android Phone (GPS)
- Pedestrian focused, other modes thinkable
- Target audience: first-year university students, new to Bamberg
- Alone or small teams - first days at uni
- Can be started from anywhere in the city centre

Geo-narrative and mode of Locomotion

- Pedestrian game primarily
- Scores are comparable (provided same start and end point)

Geo-content and game relocation

- Database of landmarks is curated
- No auto-generation (e.g. from Google Maps)
- Thus, only partly relocatable (inside the city of Bamberg)
- Assures content is relevant to the player

Temporal Balance and Duration of the game

- The game ends when final destination reached
- Game time can be adjusted by choosing:
  - Maximum Distance
  - Destination (inside chosen radius)
  - Minimum number of rounds
  - Amount of landmarks for estimation

Technology and other equipment

- Android Device with GPS and internet connection (for map)
- One per player or team

Geogame mechanics and rules of the game

- Current position is starting position
- Adjust options
- Choose destination by clicking on map
- Per round: Guess distance of landmarks
- Penalty determined by avg. error of your guesses
- Step = Maximum Step Size - Penalty
- Max Step Size = Distance from start to destination / minimum rounds

Example

- Total distance: 1km
- Minimum rounds: 10
- Average Guessing Error per round: 40m
- Step $= \frac{1km}{10} - 40m = 60m$

Additional Material

- Protype
- Preliminary UML Diagram