**Introduction**

**Mobile Social Networking**
One or more individuals of similar interests or commonalities, conversing and connecting with one another using the mobile phone.

**Global Positioning System**
Provides reliable location and time information from GPS satellites.

“Develop a social networking application for mobile phones, to collect and provide information about the geographical position of each member of a community, using Global Positioning System”

**Functionality**

- Developed in Java
- Uses location information from GPS enabled devices.
- Client/Server application
- Users register to a community.
- Client sends location information via Wi-Fi or GPRS to the Server depending on availability.
- Server stores user location information and timestamps.
- If authorized, users can obtain other user location information.
- Location visualization on Google Maps or OpenStreetMap (OSM)

**Technical Details: Server – Side**

- Server is multithreaded
- Start the Server:
  - Open a socket
  - Wait for a client to connect
- On Client connection:
  - Retrieve user’s information
  - Perform authorization and friend matching
  - Send location data
  - Retrieve and store location information data (longitude, latitude)
  - Convert longitude and latitude to place name
  - Send to the user the name of the place and the longitude, latitude values
- User mobility visualization:
  - Show a map or satellite picture on a window
  - Works with Google Maps and OSM
  - Create the trace on the map

**Technical Details: Client – Side**

- User can:
  - Create and manage communication between members of the same community
  - Utilization of Google Maps and OpenStreetMap API
  - Show the position of a friend on a map (not only as longitude and latitude values)
  - Show the name of the requested friend place, using reverse geocoding
  - Watch the trace of a device which uses the application
  - Platform independent application

**Achievements**

- Create and manage communication between members of the same community
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- Watch the trace of a device which uses the application
- Platform independent application