FP7 Project
Grant Number 288238

VENTURI

WP6 Technology Integration, Evaluation and Test-cases

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- Platform benchmarks (backup slides)

Deliverable D6.1

- D6.1 “Report on the performance of platform profiling tools and techniques” (R, M8)
- Contributions from: ST-Italy, STE, Metaio
- Submitted to project coordinator on May 23rd
- Includes detailed description of platform benchmarking tools that will be used throughout the project

- D6.3 “Use case(s) implemented on VENTURI integrated platform V1” (P, M12)

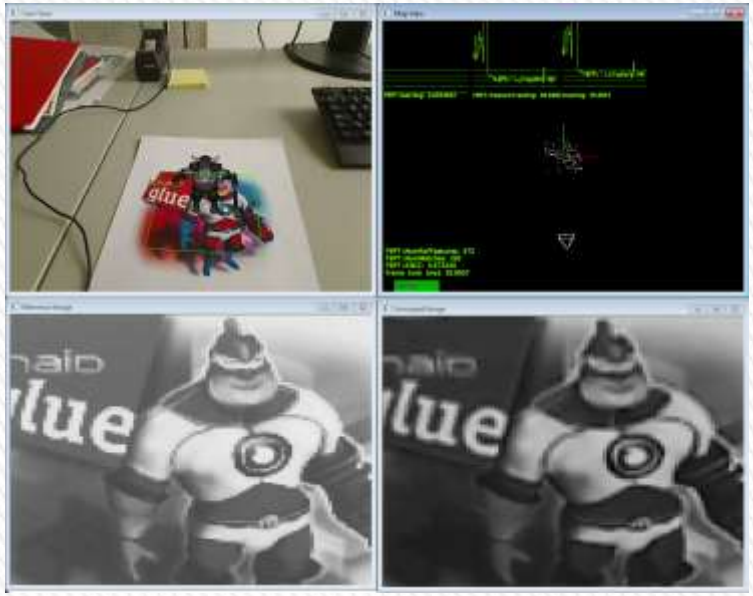
- Initiated by editing Y1 demonstrator application specification: E-Diam, ST-Italy (Cfr. Y1 prototype presentation from Javier)

Deliverable D6.3

- Concentrated on platform's sensors benchmarking
- Android libsensor assessment
  - Identified and submitted sampling rate issue: data rate not-respected and sensor samples temporal diffusion. CR issued by STE
- Sensors access time statistics
  - Android Application level
  - Android NDK level
  - libsensor level
  - I2C bus level
- Magnetometer sensor assessment (issue raised in Paris f2f)
  - Magnetometer suffers from soft/hard iron effects
  - Compass-based tests confirming poor magnetometer data
  - Platform is missing runtime calibration
  - Ellipsoids evaluations confirm significant skews
- Sensor fusion algorithms assessment ongoing
- Let us know benchmarks you'd like to run!

T6.3 Profiling, bottleneck detection and software optimization

- T6.3: Profiling, bottleneck detection and software optimization
  - Participated in writing the document D6.1 Report on the performance of platform profiling tools and techniques
  - Implemented new profiling tools (debug tools) for live markerless tracking evaluations



T6.3 Profiling, bottleneck detection and software optimization

- T6.4: Platform integration and demonstration
  - Tested the markerless tracking wrt. planar scenes on STE's hardware reference board
  - Tested the 3D markerless tracking using the STE hardware reference board running ICS
  - Fixed (with a workaround) the camera image rotation : for that we had to rotate the displayed camera image and we had to disable the Gravity usage as it would be inconsistent with the camera image
  - Helped eDIAM installing and having the metaio Creator running on their STE hardware reference board running ICS

T6.4: Platform integration and demonstration

- Agreed and documented game control setup
- Preliminary, proof of concept application delivered based on planar tracking
- Agreed on single player/multiplayer game scenarios
  - Fireman
  - Burger King

Y1 demonstrator

- Discussed yesterday

- Wrap up, action items review, homework definition, deadlines assignment

Integration

Benchmarks backup slides