Case Study: Performance Optimization to a GPS-based lap timer application for Track Attack

Client
The client is a GPS-based lap timer app that integrates HD video with lap time, vehicle speed, track maps, acceleration and deceleration.

Challenges
The client sought performance optimization for their GPS-based lap timer application. Some of the areas where they specifically sought improvement were:
- Synchronizing pre-installed tracks on the handheld
- Instant video playback
- Profiling of the tracks and maps
- Enhancements for recording, reviewing, storing and sharing of lap performance.
- Support for all the new session types

Solution
ISHIR’s mobility experts helped the client to develop a comprehensive mobile strategy and enabled the following:
- Fully integrated solution for GPS-based lap timer, capturing top, average and low speeds, acceleration/deceleration and location on the track map for iOS, Android and Windows Phone
- Enhanced session history and track database functionality
- Custom track according to user’s location
- Intuitive dashboard reports
- Instant playback and improvement in timing accuracy
- Full version support and maintenance
- Automatically starts and cuts videos to lap length
- Fully integrated with the iPhone assets library

Some screenshots are given below:
Result

- Enabled enhanced session history and track database functionality
- Improved session record and session playback screens
- Improved lap detection and timing engine

**Technologies**: iOS, Android and Windows