

Specialized hardware for athletes monitoring during running races can be replaced by a smartphone with an internet connection and race server. Thesis implements less expensive solution with even more functionality for competitors. We have developed a mobile application for online tracking of competitors, which is not only measuring individual performance, but also collects data from all competitors to a server. The server composes overall ranking in particular race which is distributed back to the competitors. Live results can be accessed over a web interface, including athletes positions on map. Application solves the problem of large battery consumption by reducing the frequency of location capturing.