



Growing Competitive Advantage with Sport Tracking Application

Applying Mathematical Model for Improved Sports
Performance

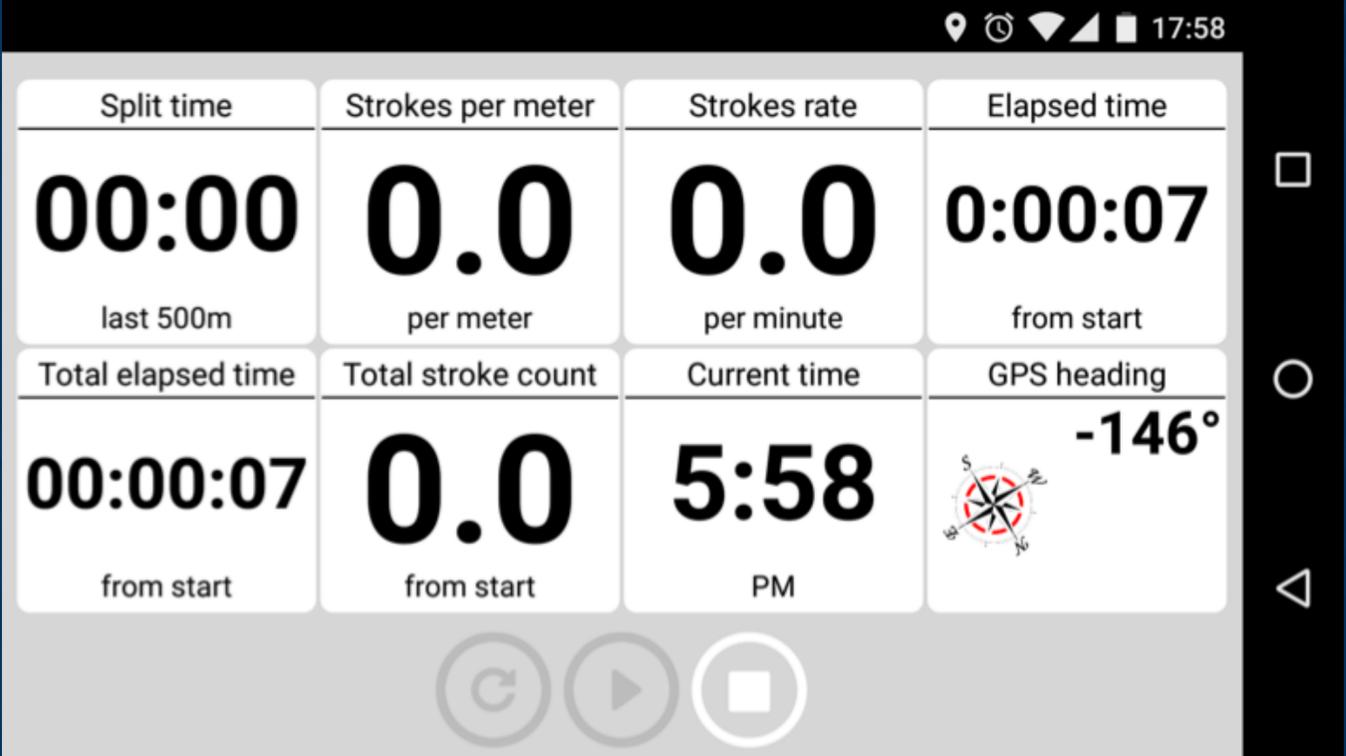
Give the rowing a Second Wind with
the Unique Math Model

Client

#academic rowing #GPS tracking

The client is a specialist in the field of academic rowing who decided to improve the trainings by using the mobile applications.

He approached the Inoxoft company with a request to devise an application that would count the statistics on the rows and, based on the statistics, the team would improve the rowing technique increase the sports result.



Challenges

#academic rowing #GPS tracking



The main challenge of calculating the quantity of rows lied in the physical nature of the very row



Ideally, the mobile application had to react to the sharp moves of the rowers to count the quantity of rows. However, this task was complicated by the vertical and horizontal movement of the racing shell



Hence, the main challenge was to optimize the Math Model, which would counts the rows, to the very rowing process



The physical nature of rowing is difficult to calculate due to the simultaneous vertical and horizontal movement that causes the additional mathematical noises that change the statistics curve

Solutions

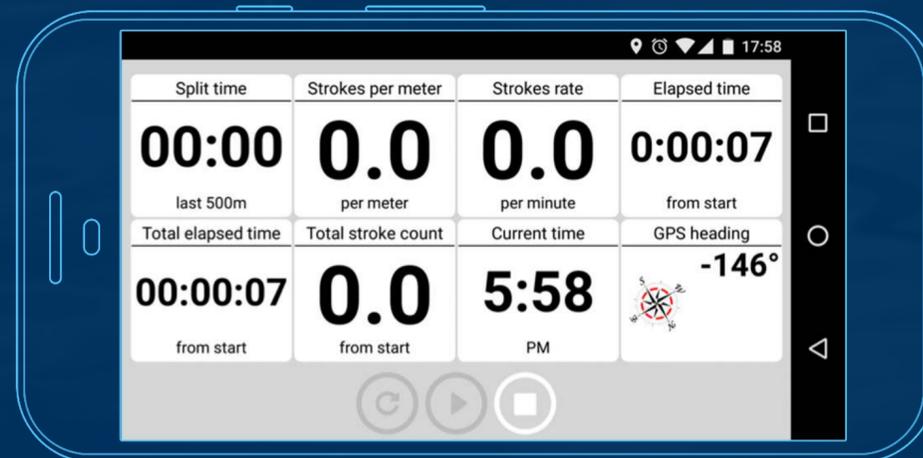
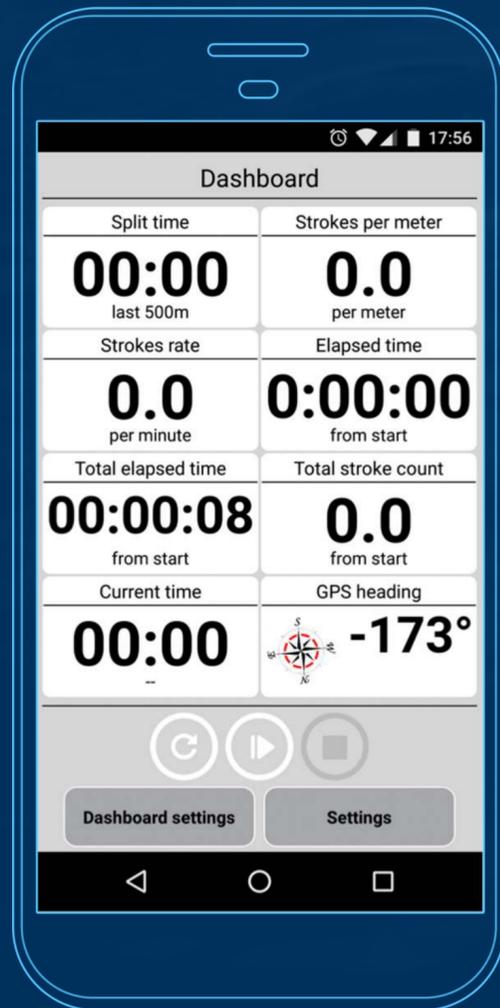
#academic rowing #GPS tracking

- 1** The primary task for the Inxoft developers was to calibrate the application so it would count only the rowing moves and ignore all the rest.
- 2** We conducted a specific calibrating procedure with vertical balancing and adjusting the mathematical model, responsible for counting the quantity of rows, to the specifically devised Math Model.
- 3** In the core of the application lies the Math Model that allows the user see the basic statistics for each minute, five hundred meters, and the entire way.
- 4** Having this specific data, the trainers can optimize the rhythm and frequency of the rows and, eventually, improve the sports performance.

Results

#academic rowing #GPS tracking

Eventually, the client received an application that records the essential rowing parameters and helps the rowing trainers adjust the movement to improve the sports performance.



The application boasts the following features:

- ✓ Accurate Row Counting System
- ✓ High level filter for mitigating the effect of noises
- ✓ Improved sports performance
- ✓ GPS tracking

Technologies used:

1. Mass Modeling Algorhythms
2. Java
3. GPS
4. Android



Thank You!

CONTACT US

Our Website:

www.inoxoft.com

Call us:

+38 (063) 836 54 71

Write to us:

contact@inoxoft.com

Our LinkedIn:

[Profile link →](#)