

# **QA and Testing Expertise**



# What is Timspark

A custom software development boutique with a special business model that ignites and fosters full-fledged development teams and inspires every engineer to deliver outstanding results.



**Core Teams** 



Understanding of industry & business domain



High-quality teams with a proven expertise

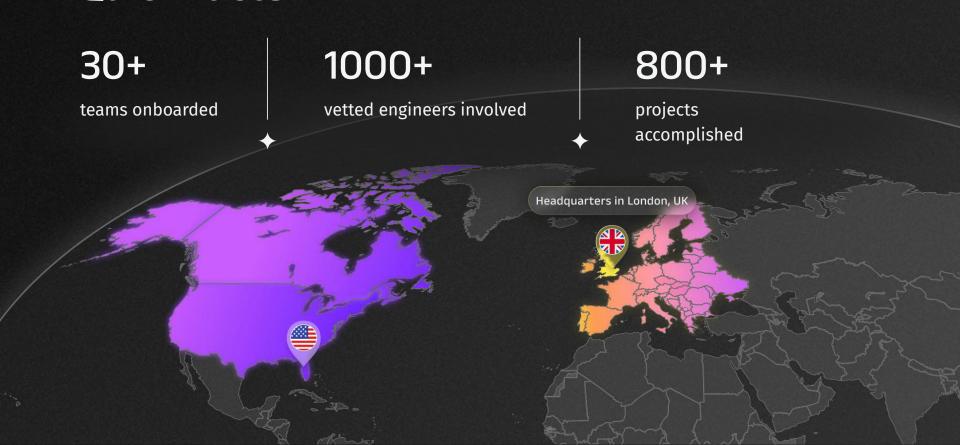


Teams are highly motivated



Accountability and ownership within the teams

# **Quick facts**



# **Key information**

Certified development centers in

Poland, Lithuania, Georgia

Headquarters in

London, UK

















Global 200+ client base covering following industries:



Banking

Healthcare

eCommerce

Education

Logistics

Transportation

Manufacturing

timspark

# **Industry verticals**



Finance, banking and insurance



Logistics, supply chain and transportation



Architecture, construction and real estate



Healthcare and life sciences



Tourism and hospitality



Energy, oil and gas



eCommerce and retail



Media and entertainment



Public services and utilities



Education



**Telecommunications** 



Agriculture



Manufacturing



**Business management** 



Art and culture



Automotive



HR and recruiting



Ecology



# Our services



Timspark provides professional services around bespoke software:



# Full-cycle product development

• We deliver a premium market-ready product that meets your customers' needs, from conceptualization to the design phase to final production and launch.



# **IT-Consulting**

With our technology audit and consulting expertise, we offer holistic guidance, identify areas for improvement, and develop effective strategies to meet your business needs.





# How you can work with us

We are flexible. At Timspark, we offer different engagement models, from full-fledged teams to staff augmentation, to help you achieve your current business needs.



# **Team augmentation**

Skilled engineers to enhance your in-house team



## **Dedicated teams**

Development units built specifically for your project



## **Core Teams**

Pre-built development teams with deep expertise

# **End-to-end QA processes**

Throughout the development pipeline, we adhere to continuous quality assurance.



Our main goal is not only simply identify inconsistencies, errors, and flaws through testing but also focus on defining vulnerabilities at early stages and preventing further occurrences.

01

We are dedicated to safeguarding and enhancing project quality throughout the software development lifecycle. 02

We understand the QA processes and technologies, establish efficient collaboration and foster flawless development cultures. 03

Driven by the same goal of trust and respect, QA is every team member's responsibility at Timspark.



# QA team key facts

We aim to eliminate vulnerabilities at the early stages of development with well-established QA processes, efficient collaboration, and QA provision among all the parties involved.

16
years
of experience

QA engineers

300+
projects
delivered

\$5%
senior
& middle

Automation QA engineers 41

Manual QA engineers 64



# How we ensure quality

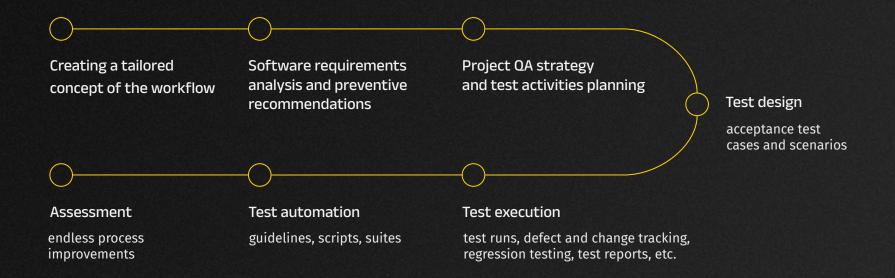
- Best quality practices and procedures.
- Established quality assurance workflow.
- Regular process audits, continuous improvement.
- Peer code reviews.
- Regular project review meetings.



- High code coverage with unit tests.
- Testing automation added to CI/CD pipeline.
- Compliance with global standards: ISO 27001, ISO 9001, OWASP, ISTQB.
- Left-shift testing approach.
- Review of software compliance.

# Established quality assurance workflow

KEY STEPS OF OUR SOFTWARE QUALITY ASSURANCE AND CONTROL WORKFLOW



# **Our software QA services**

PART 1/2

Software quality assurance	We gather all project data, define and implement software development and QA processes.
Software QA automation	As a result of project goals and constraints, we define the required testing automation to accelerate processes and reduce costs.
Software quality assessment	Our QA engineers test and audit software architecture to define weak and strong points.
Quality assurance consulting	We provide professional advice and consult businesses on the most relevant QA processes and test approaches.

# Our software QA services

PART 2/2

**CI/CD** integration

We help integrate QA solutions for continuous integration and delivery systems, defining conditions and triggers for autotests.

**Dedicated QA teams** 

We have specialized teams for full-cycle project assessment, testing and quality assurance.

**QA outsourcing** 

As an alternative to hiring a whole team, we can arrange an outsourcing initiative that will yield high-quality results for a lower price.

# Types of software we test



Web application testing



Mobile application testing



Desktop application testing



IoT testing



SaaS and cloud testing



Microservices testing



Database testing



Enterprise software testing



Other custom software testing

# **Quality assurance tools**

PART 1/2

# Test/defect tracking tools

Mantis, Atlassian JIRA, Elementool, Redmine, MTM, Bugzilla, VersionOne, YouTrack, Rally, QATouch.

# REST/HTTP API clients

DHC, Advanced rest client, Postman, Swagger, Fiddler, Charles.

# Test case management system

TestLink, JIRA plugins, Quality Control, Qase, Testrail, Clickup.

# Automated web testing tools

Selenium WebDriver (PhantomJS), Selenium IDE, Selenium Builder, SoapUI.

# Continuous integration tools

Jenkins, TeamCity, Vercel, bitbucket, azure, github actions, gitlabCil, CircleCl.

# Test automation frameworks

SpecFlow, Cucumber, Bellatrix, RobotFramework, custom frameworks, Frameworkium.



# **Quality assurance tools**

PART 2/2

# **Tools for security testing**

Nmap, OWASP ZAP, Kali Linux.

## **Debugging tools**

Browser specific developer tools.

# Building tools for automated testing

Ant/NAnt/CppAnt, Maven, Grunt.

# **Version Control**

system

Git, SVN, Github.

# Unit testing frameworks

NUnit, MsTest, Mocha, PyTest.

# Version control systems

DHC, Advanced rest client, Postman, Swagger, Fiddler, Charles.



# How can QA benefit your business?

# **Excellent quality**

We deliver software solutions with perfect functional performance, impeccable user experience, and reinforced security.

## **Relevant expertise**

We test solutions of any complexity, from traditional web apps to complex databases, SaaS, and enterprise-grade platforms.

## **Cost-effectiveness**

Our range of individually tailored services help our customers save time and money on testing without sacrificing quality.

## **Complex approach**

In addition to testing, we help identify roadblocks in advance, reduce errors, cut costs, and speed up the development process.

## **Faster delivery**

We help clients accelerate development and production cycles through an early-stage testing approach.

## **Enhancing user experience**

As part of the testing process, our QA engineers consider all the processes from the end user's perspective.

# **Technologies**

**BACK-END** 



**JAVA** 





**RUBY** 



.NET/C#

NODE.JS





RUST





UNITY

FRONT-END



REACT



**ANGULAR** 



**VUE.JS** 



**JAVASCRIPT** 



**TYPESCRIPT** 

MOBILE



SWIFT



**KOTLIN** 



FLUTTER



**REACT** NATIVE



XAMARIN, .NET MAUI **PLATFORMS** 



**AWS** 



**AZURE** 



CGP



SAP



**SALESFORCE** 

# QA and testing types

Functional testing

Performance testing

Compatibility testing

**Usability testing** 

Cybersecurity testing

Release testing

Acceptance testing

**Exploratory testing** 

**GUI testing** 

**Accessibility testing** 

**Localization testing** 

Requirements testing

Prototype testing

**Reliability testing** 

API testing

ETL testing

Data warehouse testing

Other

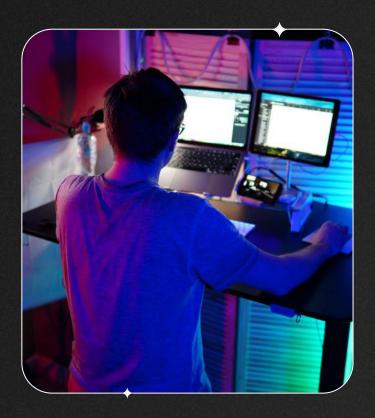
# **Automated QA**

# **Automated testing**

- Unit testing
- Component testing
- Integration testing
- User Interface testing
- End-to-end testing
- Compatibility testing
- Contract testing
- Performance testing

# Automation test levels we cover

- Smoke testing
- Sanity testing
- Regression testing
- Acceptance testing



# **Our automated QA services**

Through automated testing services, we streamline the quality of software development by pointing out rough edges, facilitating efficient processes, and defining proper test coverage.

# **Unit testing**

We finesse software source code line by line, testing the underlying sets of software modules individually.

## **Component testing**

Through in-depth component testing, we facilitate the achievement of high-quality performance.

## **End-to-end testing**

Our experts give you confidence that all system modules and interfaces meet user requirements and needs to the fullest capacity.

## Integration testing

To ensure productive, reliable functionality, we ensure all system modules are integrated efficiently.

# **Compatibility testing**

Our cross-platform, multi-device testing outlines how well your solution performs across multiple platforms and devices.

## **User interface testing**

We ensure accessible, convenient, and eye-catching user interfaces that stand out from the rest and boost brand recognition.

# QA test management tools

## Test management and bug tracking

Jira, Xray, PractiTest, Rally, Azure DevOps, TestRail, testlink, MTM, Qase, Clickup.

## **QA** and manual testing

Testlodge, Zephyr, Testlink, Trello, Jira, Basecamp, Sauce Labs, Browser Shots, Browser Stack, Soap UI, Postman, REST, assured, CloudApp, Skitch, Fiddler, Charles.

## **Mobile testing**

TestComplete, Android Studio, xCode, Charles, Appium, Xamarin.UITest, Carina.

## **Quality assurance consulting**

Postman, Swagger, Apigee, Citrus API, Fiddler, Charles, Catalon Retrofit.



# Why choose Timspark as a QA provider?



Efficient software development process with all-around QA coverage.



Full-scope testing for products of any purpose and complexity.



Access to the market-defining testing and QA tech stack.



Cost-saving opportunities streamlined by thorough software polishing.

# How we communicate

Our communication is built on principles of transparency, accountability, and trust. We are quite flexible in the matters of communication schedule and frequency.

We create a personalized communication strategy for each project and you can decide which means and time span of communication is best for you.

# Daily

short stand-ups with project managers and dev teams

# Weekly

video calls or written reports that track the project's progress

# Monthly

core meetings with detailed reports and plans for the next iteration

# On-demand

brainstorming or problem- solving sessions

# Instant payments mobile app

**BANKING** 

**FINTECH** 

## **CHALLENGE**

Native iOS and Android applications serving as a digital wallet for instant peer-to-peer payments.

### SOLUTION

Within the app, users can make requests for payment (e.g., to split a restaurant bill), pay through QR codes, make money transfers, and more. The app provides information about account balance and stores the history of payments.

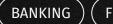
Beginning with the conceptualization, layouts, and requirements, the QA team from Timspark accompanied all phases of the project lifecycle. To detect problems early and fix them as cheaply as possible, we focused on shift-left testing.

Furthermore, our QA engineers checked the application and personal data for safety and security.

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# Mobile banking app



FINTECH

## **CHALLENGE**

Mobile app allowing users to access advanced spectrum of fintech services.

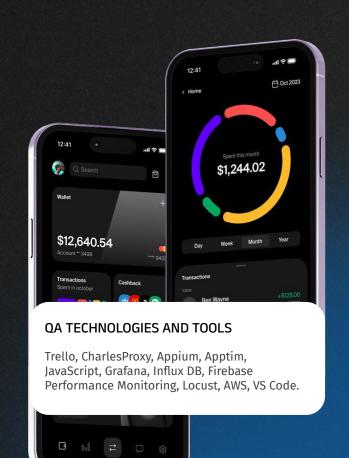
### SOLUTION

Mobile application including a large-scale full-cycle trading platform and a business center for B2B and B2C, offering loans, deposits, trust management and other options.

Our QAs joined the project after the MVP stage, collecting data about the app and formalizing all collected information into a testing strategy and plan. It was the team's responsibility to maintain all new functionality and perform regression testing on previously developed functions. Main user cases and integration checks were automated to speed up and reduce development costs.

Over the next half a year, the team's capacity increased from 20 story points to 35, facilitating the product roll-out and eliminating scope creep.

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# Tax payment application



TAXES

### **CHALLENGE**

The first-of-its-kind app integrated with the largest bank allows self-employed people to control and pay their taxes.

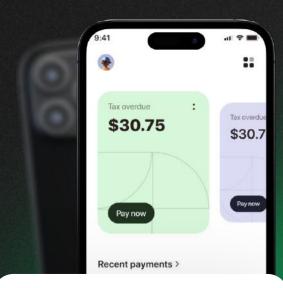
### **SOLUTION**

The solution provides interaction between self- employed people and the Federal Tax Service online, without requiring a personal visit to the tax office.

Our QA team joined the project 2 months before the release, with the main task to meets all functional and non-functional requirements, achieve good usability scores, eliminate interface issues, and ensure robust security and performance.

We thoroughly tested and reviewed the entire system, and the last iteration was devoted to fixing priority defects and stabilizing the build for release.

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## **QA TECHNOLOGIES AND TOOLS**

Appium, Apptim, Stf, Firebase Performance Monitoring, Xcode Instruments, XCTest with measureBlocks, JMeter, Distributed Load Testing on AWS, Prometheus, Grafana.

# Trading mobile application

**BANKING** 

**INVESTMENT** 

### **CHALLENGE**

Android and iOS mobile application for managing investment assets.

### **SOLUTION**

In the application, users can remotely select, buy, change and redeem shares.

To guarantee fail-proof performance, we conducted all-round fault tolerance and reliability testing. As a possible peak load, our QA specialists selected 50000 requests per minute. Furthermore, we increased the load to peak values and checked for defective requests and timeouts. Ultimately, our system responds in less than one second.

As part of the reliability test, we chose 80% of the peak load, with periodic increments (once per hour) up to the critical points.

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## **QA TECHNOLOGIES AND TOOLS**

Appium, Apptim, JUnit 5, Kotlin, Stf, Wireshark, Influx DB, Firebase Performance Monitoring, Xcode Instruments, XCTest with measure Blocks, JMeter, Distributed Load Testing on AWS, Prometheus, Grafana.



# Loan management application

BANKING

### **CHALLENGE**

Loan management solution to facilitate lending processes.

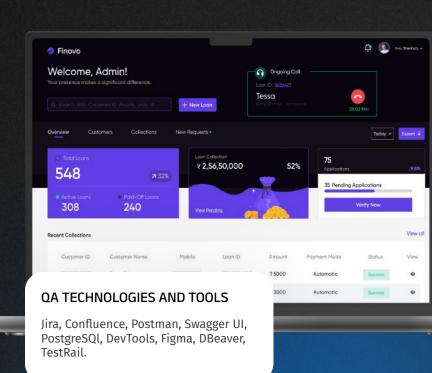
### **SOLUTION**

Timspark has taken over the landing platform development project. Our team has delivered a top-tier loan management system with rich functionality to facilitate lending processes.

Our engineers conducted functional testing in terms of business logic and UX, testing responsive design, web interface. Our company also analyzed and expanded the coverage of the Automation suite.

- API testing for rudimentary features in terms of protecting user data.
- Optimizing the Automation Suite Architecture
- Testing integrations with 3rd party services in the field of providing transaction history, KYC / KYB, credit history and rating, monitoring loan payments, doing business (ERP).

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# Intent-based chatbot

TELECOM )

### **CHALLENGE**

Real-time chatbot that answers customer queries in a human-like manner.

### **SOLUTION**

Timspark has built an intelligent chatbot using intent-based models and scripts for user requests to alleviate operators' workload.

From the very first iteration, QA began testing new and previously developed features, while simultaneously aggregating general information about the system, business, user, and functional requirements. In the second iteration, QA provided the test plan and strategy, synchronizing the processes with the project team. By the end of the development cycle, the team performance had increased by 40% as a result of the QA recommendations.

 $\boxtimes$ Hello, I am Doske A bot that likes unusual 伛 Write me the first question questions and tasks I can answer any question you Write here have and help you solve your problem ow to cook the perfect pasts ow to align elements in CS OA TECHNOLOGIES AND TOOLS Appium, JavaScript, Allure, CharlesProxy, AzureDevops, VS Code.

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# Al driven call enter software



### **CHALLENGE**

Al-based call center software for a big telecom company that connects operators and clients within a unified system.

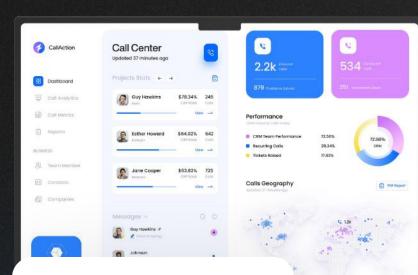
#### SOLUTION

Timspark has forged a robust AI-based call center automation software that processes calls from clients through AI-automated voice recognition and request identification.

QA was directly involved in the training and validation of ML algorithms, executing full end-to-end custom scripts testing and automation. We provided the main test coverage at the API level.

To ensure error-free functioning, we simulated a load of up to 7000 calls per minute. During performance testing, our QA engineers ramped up the load to peak values, checking for defeated requests and timeouts.

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## **QA TECHNOLOGIES AND TOOLS**

Appium, Apptim, Grafana, Influx DB, Firebase Performance Monitoring, XCTest with measure Blocks, Jetpack Macrobenchmark, Locust, AWS, Prometheus.

# Telecom security system

**CYBERSECURITY** 

**TELECOM** 

## **CHALLENGE**

Telecom security system for the large US-based telecommunication services provider.

## **SOLUTION**

As the company expanded into new regions and the number of users increased, the system began to fail and slow down. To address the issue, our QA team was engaged to perform load testing and identify bottlenecks in the system.

Thus, we conducted all-round fault tolerance and reliability testing. As a possible peak load, our QA specialists selected 50000 requests per minute, 50% of which were large data fragments (> 100 MB). Furthermore, we increased the load to peak values and checked for defective requests and timeouts to guarantee fail-proof performance.

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## **QA TECHNOLOGIES AND TOOLS**

Appium, Apptim, JUnit 5, Kotlin, Stf, Wireshark, Influx DB, Firebase Performance Monitoring, Xcode Instruments, XCTest with measure Blocks, JMeter, Distributed Load Testing on AWS, Prometheus, Grafana.



# OCR driven app for text scanning



### **CHALLENGE**

OCR tool that recognizes text from a photo or image and turn it into machine-encoded text, reducing the burden of paperwork.

### SOLUTION

On this project, Timspark QA team fully accompanied all phases of development, covering functional and non-functional requirements, QA processes integration, and autotest system coverage.

For performance testing, we chose 500 requests per minute, 20% of which were resource-intensive cases (uploads with poor image quality). As part of the fault tolerance testing, we ramped up the load to the peak value to ensure that the failure rate was not more than 2% of the total. This allowed us to release a quality solution on time and maintain a high speed of development.

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# **Decision support system**



## **BUSINESS INTELLIGENCE**

## **CHALLENGE**

Timspark has developed a smart solution that helps managers make informed decisions.

#### SOLUTION

Decision support system is a platform that helps leaders of large companies save time and cost through monitoring the efficiency of corporate information technology area. The system analyzes IT applications, equipment and operations, provides information on costs, risks, and priorities and predicts the impact IT has on revenues, and more.

On the final stage, our QA team maintained manual/automated testing, regression testing, security testing, smoke testing, formal and Ad hoc testing, supporting business requirements and testing documentation to deliver a flawless product tailored to customer's needs.



Java 8, Tomcat, Spring, Hibernate, Maven, Oracle, Liquibase, Git, Jenkins, Apache Tiles, JSP, AngularJS.

<sup>\*</sup> The image is illustrative. Project details cannot be disclosed due to the conditions of NDA between the Development Team and the Customer.

# Video conference system

**COMMUNICATION** 

### **CHALLENGE**

A multi-functional video conference system for web, iOS and Android.

### **SOLUTION**

The solution offers wide functionality, including organizing presentations and conferences, customization with user's templates, board and chat usage during a conference, video recording, managing contacts list, etc.

Our QA team accomplished:

- Functional and smoke testing of the system's web part and version for mobile devices;
- Preparation of reports on testing;
- Documentation on the found bugs and checking of the corrected bugs;
- UI, manual testing and negative testing;
- Requirements analysis and documentation;
- Preparing and correction of user guides.
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# Wellness portal

**SPORTS** 

HEALTHCARE

#### **CHALLENGE**

Wellness portal to engage in sports activities and enjoy a healthy lifestyle.

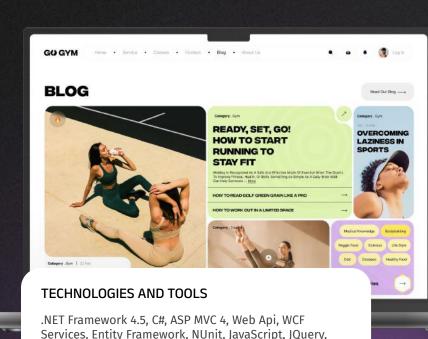
### **SOLUTION**

Our project team has built a wellness portal which helps companies to organize sport activities and healthy lifestyle for their employees.

The work was arranged according to classic Agile methodology. Testing specialists were essential participants of all project meetings, including Scrum, kick-off, pre-grooming meetings and especially demo presentations that followed each release.

Automated tests were used for regression testing for all the previously implemented functionality. This automated test project integrated with TeamCity to trigger test run after each build and generate report send to target dev teams.

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AJAX, AngularJS, MS SQL Server 2008, Git, TFS, INTELLIJ,

Selenium 2.9.1, TestNG, Apach Maven, Java 1.8.

### Mobile app for car remote control

**AUTOMOBILE** 

### **CHALLENGE**

Advanced solution for motorist to manage their cars remotely.

### **SOLUTION**

Our company has launched the application intended for starting and stopping the car engine remotely, tracking the car route, monitoring car security and safety while driving and when the car is parked via smartphone.

As for the quality assurance, our specialists accomplished functional testing, UI testing, smoke testing, bug regression, security and access control testing, building test reports and documentation, reporting found issues and retesting addressed issues, and preparing guides for system reports.

As a result, we launched a feature-rich solution to manage car remotely, ensuring increased security for drivers.



### Mental health online services

**HEALTHCARE** 

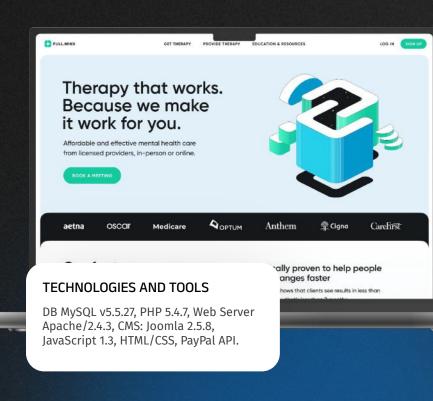
### **CHALLENGE**

Web service to address health issues and receive medical care.

### **SOLUTION**

Timspark has developed a website for mental health services online via mobile devices that provides diagnostic tools, self-administered screening tests, treatment programs online, guidelines, self-help tools, videos and workbooks, interaction with experts in virtual private offices, tools progress tracker to record and analyze symptoms, moods and activities, and many more.

QA team accomplished functional and smoke testing of the system's web service, reports on testing, documentation on the found bugs and checking of the corrected bugs, UI, manual and negative testing, requirements analysis and documentation, and preparing/correction of user guides.



### Web app to track physical activity

**SPORTS** 

**FITNESS** 

### **CHALLENGE**

Web application where users can monitor their physical activity and track fitness progress.

#### SOLUTION

Our company has built a smart web solution that includes fast registration and synchronization of fitness devices with the website, displaying statistics of activities for various periods, tracking progress, completing assignments, and communication with other users.

As for the quality assurance, our specialists conducted smoke and functional testing, bug regression, security and access control testing, automation testing (writing and running automation tests), preparation of reports on testing to ensure unmatched product quality.



Selenium 2.9.1, TestNG, Apache Maven, Java 8.

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### Website for smart dog collars

**E-COMMERCE** 

#### **CHALLENGE**

Redesigning the website for dog smart collars promotion.

### **SOLUTION**

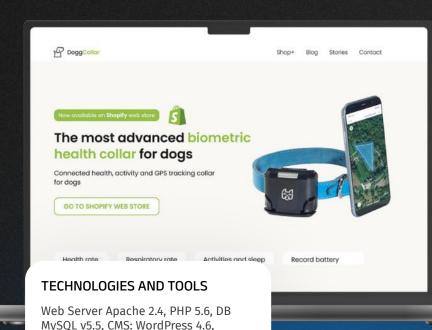
The goal of the project was to completely redevelop a website for dog smart collars promotion and integrate it with an already existing Shopify web store. Throughout the project, our dedicated software engineers were responsible for:

- UI/UX design;
- Registration panel;
- Customers gallery (with pictures of dogs wearing smart dog collars).

In turn, our QA team accomplished functional testing, UI testing, smoke testing, bug regression, documentation on the found bugs and checking

of the corrected bugs.

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Bootstrap framework, jQuery, HTML5/CSS3, SASS, Gulp.

## Web application for decision-making

### **BUSINESS INTELLIGENCE**

### **CHALLENGE**

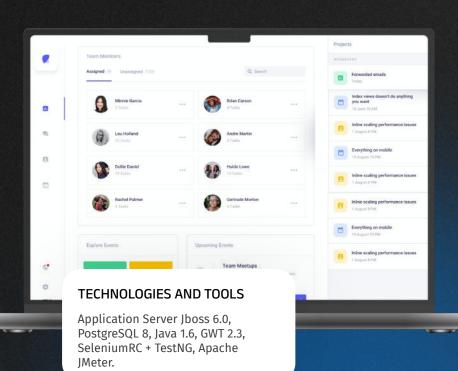
Web app that aid managers in making insightful decisions based on employees' performance.

### **SOLUTION**

Timspark has developed a web-application that assists CEOs in making decisions regarding encouraging or punishing employees of groups, teams, or collectives.

The application is realized so that employees could create a poll of some type in which they can add all possible participants and spectators.

Our QA team created and edited test cases, performed functional testing, compatibility testing, smoke testing, created load test cases in JMeter, conducted loading tests, automated tests, prepared reports on testing, documented found bugs, and checked the corrected bugs.



### Real estate web platform

BANKING

### **CHALLENGE**

Developing web modules for real estate financing platform.

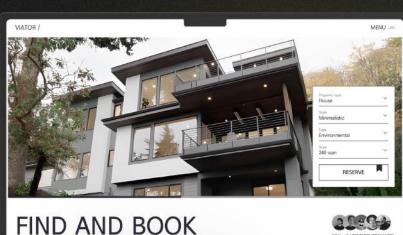
### **SOLUTION**

Timspark was engaged in quality assurance procedures aiming to ensure proper development processes of the module of state subsidies for real estate financing.

Our team performed the following activities:

- determination of a test strategy, test plans, goals, risks, analysis of requirements and all bank documentation for the project:
- covering the module with test checks at the integration (backend / frontend) and system levels:
- manual functional/non-functional testing;
- participation in PI Planning, providing the necessary information to product managers for a product demo.

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**TECHNOLOGIES AND TOOLS** 

Jira, TestRail, Confluence, Postman, Swagger, DevTools, Figma, pgAdmin, DBeaver, Fiddler.



## Marketing campaign tool

SOCIAL

MARKETING

#### **CHALLENGE**

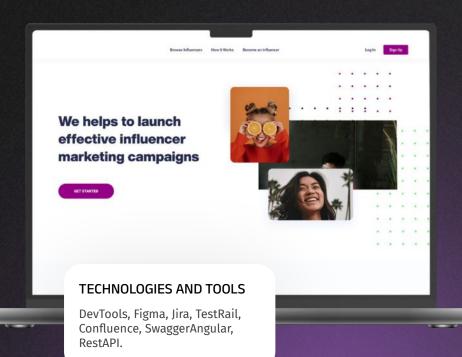
A web platform that helps to manage marketing campaigns.

### **SOLUTION**

Timspark has developed a top-notch web platform for marketing campaign management. The application includes a user-friendly campaign builder and several campaign management tools.

Both functional and non-functional testing activities were carried out. For example, cross-browser testing, localization testing, usability testing, and more. In addition to manual testing (i.e. UI testing, requirements testing, database testing, and API testing), we applied for automated testing.

In the process of API testing, we also wrote test collections in Postman, which were embedded in the CI/CD system by DevOps and run during each commit.



### **NFT** marketplace

NFT MARKETPLACE

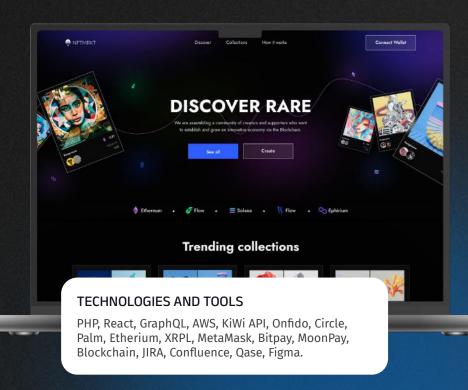
### **CHALLENGE**

The application helps popular brands create, sell, purchase and trade NFT tokens among themselves.

### **SOLUTION**

The solution is a marketplace where you can buy unique NFT tokens from popular brands. The assets can be obtained through an auction directly from the brand, or purchased from other users who resell them at a fixed cost.

Following the client's request, we developed NFT tokens, created animated 3D models, ensured the option to sell tokens through smart contracts, and more. QA part included functional tests, UI tess, API tests, smoke tests, integrations with third-party payment/KYC services, bug regression testing, and documentation on the found bugs and bug fixes.



# Web 3.0 gaming environment

**METAVERSE** 

3D

#### **CHALLENGE**

Collection of unique NFT avatars and immersive gaming environment for a motorcyclist community.

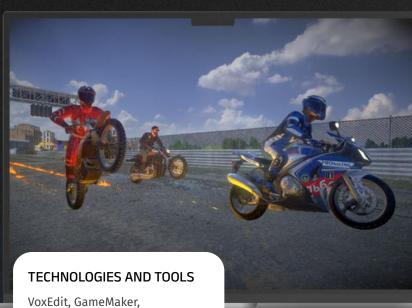
### SOLUTION

Timspark has partnered with a close-knit community of motorcycle fans who purchased spaces in the metaverse Sandbox and ordered to create unique NFT avatars and game environments using 3D design. Our talented designers built a famous racing track in metaverse from scratch, allowing users to explore and monetize in-game artefacts based on the Ethereum network.

Throughout the project, our 3D artists engaged in 3D modeling and texturing, graphics integration, and character/clothes rigging and skinning.

During quality assurance, we tested the game logic and space as well as the GUI ecosystem.

\* The image is illustrative. Project details cannot be disclosed due to the conditions of NDA between the Development Team and the Customer.



VoxEdit, GameMaker, MagicVoxel, Blender, Slack, Performance Monitor, VR, Jira, Google Docs, Notion.

## ML-based asthma management app

HEALTHCARE





#### **CHALLENGE**

A simple and affordable ML-powered asthma management tool that helps both physicians and patients with asthma.

### **SOLUTION**

The project goal was to create an app that would help patients to manage their disease in an intuitive way. Also, the app provides data for physicians to evaluate the patient's state and adjust treatment.

Users can let the exclusively taught ML algorithm listen to how they use inhalers. Also, they can see the risk of asthma symptoms based on evaluation of various triggers like weather, humidity, etc.

During QA sessions, our specialists performed functional testing, smoke testing, requirements testing, mobile testing, new feature testing, re-test, regression testing, exploratory testing, and GUI testing.

\* The image is illustrative. Project details cannot be disclosed due to the conditions of NDA between the Development Team and the Customer.



### **TECHNOLOGIES AND TOOLS**

Python, Dart, Flutter, Django, PostgreSQL, Scikit-learn, Pandas, BorutaPy, Hyperopt, Plotly, AWS (S3, EC2, Redshift, Sagemaker, Glue), Redis, Docker, Docker Compose.

### **Geo-based NFT platform**

**BLOCKCHAIN** 

NFT

### **CHALLENGE**

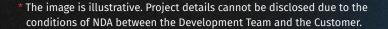
The geo-based NFT platform, allowing users to mint and sell NFTs to a broad community.

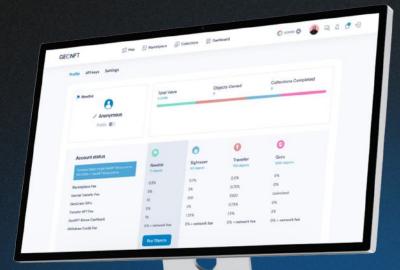
### SOLUTION

Timspark has developed a feature-rich platform for managing geo-based NFT assets and a custom token. The solution allows users to operate digital items via personal accounts, the marketplace, and the interactive map.

Our project team integrated OpenStreetMap to present the world's map with interactive NFT assets, built NFT marketplace for users to re-sell their assets, and augmented the product with the built-in cryptocurrency exchange.

To ensure flawless product quality, our QA engineers completed functional, usability, GUI, and compatibility testing.





### **TECHNOLOGIES AND TOOLS**

ava 17, Spring Boot, Spring Data, Spring Cloud Gateway, React, Redux, Redux-Saga, Reselect, PostgreSQL, EOS, Fiddler, AzureDevops, Devtools.

## Mobile app for active traveling



### **CHALLENGE**

Mobile app that allows outdoor enthusiasts enjoy hiking, biking, etc.

### **SOLUTION**

The iOS & Android app helps hikers, bikers and paddlers explore the most popular trails and routes around the world.

The travel guide app contains detailed waypoints and town guides: water sources, shelters, campsites, accommodation, restaurants, resupply, and more. Using GPS, the app guides travelers along the trails and towns even if mobile devices are offline. Our engineers were engaged in functional and non-functional testing, as well as tested various types of requirements. Our team was also involved in RC (release candidate) testing, cross-browser and cross-platform testing, API testing, localization, UI testing, compatibility testing, usability testing, etc.



## Keen to explore this further?

Let's discuss your requirements and come up with a tailored solution!

At Timspark, we intend to bring value and competitive advantage to our clients. Our dedicated teams can help you achieve your goals and add value to your offerings.

### **REACH OUT**



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