

Case Study

# AltexSoft and Diamond Duels:

Building a Gamification App for Baseball Fans

Vue.js, Spring Boot Framework, Jest Framework and Spock Framework, Bulma, Muse-UI , and Amazon Web Services



# Background

Our client is a US-based gamification startup [Diamond Duels](#). The idea of the project is to make baseball games more entertaining, allowing fans to test their knowledge of baseball and the ability to predict game outcomes while competing for points with each other.

The client reached out to AltexSoft with a product concept for an app. During the ballgame, spectators in a stadium and those watching a game online or on TV can download the app and participate in a duel. The duel is a contest of predictions on the results of outcomes of the game, whether it be homeruns, strikeouts, or other occurrences. Players join the duels, earn points for the right predictions, and lose points if a prediction is wrong. Duelers can use earned points for more predictions within a duel.



# Challenges

The client wanted a product developed from scratch, and we discussed his idea and requirements. As a result, we've defined the following scope of tasks within the project:

**1.**

Analyze the target user

**2.**

Create a product UI

**3.**

Build an MVP

**4.**

Accelerate product development

**5.**

Manage cloud environment

# Value Delivered

## 1. Defining user personas to update a product workflow

The client approached us with a ready product idea: an app concept, user journey, and wireframes. Based on the client's wireframes, an AltexSoft business analyst conducted UX research and created user personas. As a result of this analysis and discussion with the client, our team improved suggested user flow, created a product development roadmap, and considered a monetization strategy.

## 3. Creating a user-friendly interface

Our frontend engineers developed a product interface using Vue.js UI libraries, Bulma for the app, and Muse-UI for the admin panel. Our team also created a product style guide that set the ground rules for further product development.

## 5. Setting a cost-effective cloud environment

As part of the implementation, our solution architect designed a scale plan for the application deployed on Amazon Web Services. He also managed the process of setting the cloud environment for the product.

## 2. Building an MVP to test initial concept

The client suggested building a progressive web app compatible with any operating system unlike native apps and has a relatively light weight. Besides that, the AltexSoft engineering team built the front- and backend of the admin panel, integrated the MySportsFeeds API to display game flow, scores, and players. Our team implemented an in-app user feedback form that would gather new ideas for the product backlog to transform the existing MVP into a final product. We used **Vue.js** technology for frontend, **Spring Boot** framework for microservices, and **Spock** and **Jest** frameworks for QA testing.

## 4. Reducing development time

Our engineer built a Java Accelerator for setting the work environment faster, accelerating backend development. It helped the client save over 2 weeks on building the backend of both the application and admin panel.

# Approach and Technical Info

The project's scope totaled **1.3 man-years** for the described scope. It was completed over the course of 5 months by a team of eight professionals: **2 business analysts**, a **backend engineer**, **2 frontend engineers**, a **solution architect**, a **QA engineer**, and a **project manager**.

Cooperation between the client and AltexSoft is ongoing.

Our team worked in the **Scrum** workflow. The technology stack included **Vue.js**, **Spring Boot Framework**, **Jest Framework** and **Spock Framework** (for QA testing), **Bulma**, **Muse-UI** (UI libraries), and **Amazon Web Services**.

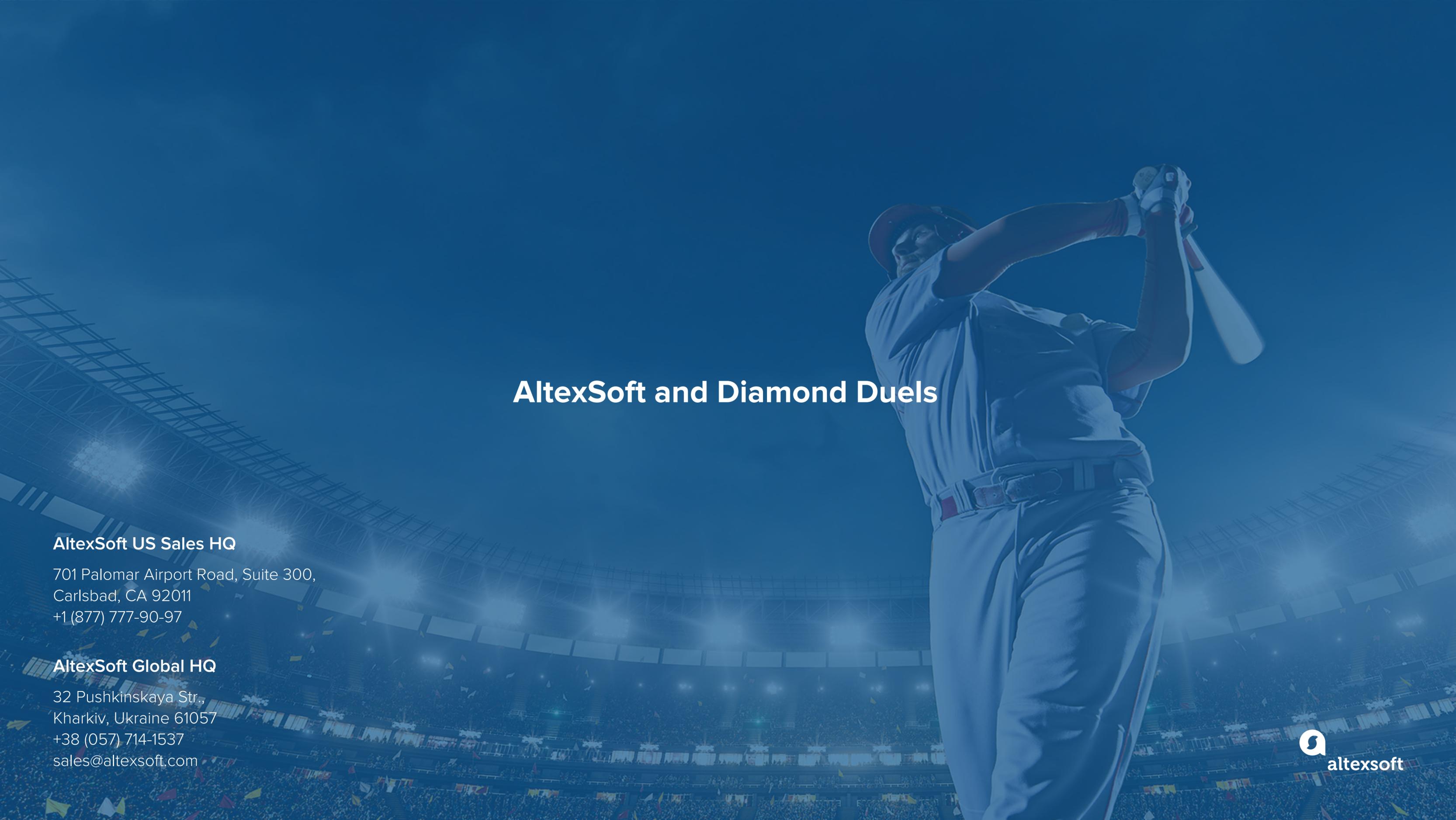
# Testimonial

“ While creating the concept for my new game, Diamond Duels, I was recommended to AltexSoft from someone that had used them on a project of their own. The process of building the app was handled with complete professionalism and went smoothly. This was my first project with this difficulty level, but all the staff - developers and managers - did a great job of keeping things moving, keeping me informed, and bringing the project in on budget. The MVP version of the app was outstanding, and the project is ongoing with enhancements and more functionality to come, and I hope to have a long, mutually beneficial relationship with AltexSoft.

I would recommend AltexSoft to anyone that has a project - big or small - that is looking for excellent people to work with, quality work, and attention to detail that will give your project the best chance of success.

”

**Philip Black,**  
Business Owner



## AltexSoft and Diamond Duels

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