daffodil

Daffodil helps F6 Online to develop a stock trading mobile application resulting in 36% increase in new users

F6 online

Customer: F6 Online

Country: India

Industry: Finance

Our Role: Product Engineering

About Client

F6 Online is a trusted and prominent stock trading platform in India, run by two seasoned directors having more than 16 years of experience in this line of business, right from NSE, BSE, MCX, currency and derivatives to CDSL and NSDL etc. They offer a diverse product bouquet consisting of equity, equity derivatives, depository, commodities, and currency derivatives with their unique zero brokerage model.

36%	67%	56%
increase in new users	increase in daily login sessions	increase in daily transactions

Problem

Over the past few years, the Indian Fintech market has seen a tremendous growth, both in terms of funding received as well as increase in consumer growth. In 2018, India ranked second globally in the area of Fintech adoption with a percentage of Fintech users at 57.9%. The primary reason for this growth story is a stupendous growth of mobile adoption as well as internet penetration across India.

F6 Online already had a web platform that allowed users to carry stock exchanges for equity, commodities and currencies. In order to increase their user base as well as enable their users to trade-on-the-go, f6 Online identified a need for an easy and fully integrated mobile application that could complement their web application. The F6 Online team was looking for a technology partner who could demonstrate market knowledge of Fintech and lead them through the development process.

F6 Online chose Daffodil Software as we brought on the table our years of experience in the Fintech industry, hands-on knowledge of finance & trading operations as well as expertise in developing breakthrough Fintech applications. On the development front, the requirement was to:

- Develop an Android and iOS application with a rich user experience and robust features to allow users to trade on various stock exchanges for equity, commodities, and currency markets.

- Incorporate unique value-added features such as Mock Trading Championship, Pay-in and Pay-out Funds, performance of key market indices (Sensex, Nifty, SGX, and USD), personalized watch list/market watch and much more.

- Integration with multiple external APIs for stock trading, funds transfer, global indices rate, E-KYC, live chat etc.

- Provide the highest levels of user security, with the same encryption and physical security as the banks

Solution

Team Daffodil initiated the project with a product design workshop. We aimed to analyse the workflows behind the app and think through the needs and possible barriers together with the client. The user experience was one of the project's cornerstones. We focused on creating intuitive usability to facilitate platform adoption, as well as lucid visualisation tools to allow for easy comparisons of complex trading data in the mobile app. The UI/UX of the application was a result of an extensive research by our business analyst team to study the behavior and motivation factors of an online investor.

It was a challenging opportunity for Daffodil to build such a dynamic application. Not that it required deep know-how of the trading ecosystem, the security of user data, and meeting legal compliance was a mammoth task.

The project plan was developed using a Hybrid Agile methodology. A combination of two different methods; Waterfall and Agile was used to plan and monitor the project in order to provide the flexibility and transparency necessary to adapt to the fast-changing requirements of stakeholders along with a step towards continuous delivery.

Envisaging the utter need of scalability, robustness, and security of the application, a cloud-based architecture was designed so that the system is exquisitely responsive to growth, and ensures data security and privacy.

The mobile solution was developed in CakePHP (MVC Framework) using MYSQL as the database on the server side and Native Languages. Java (Android) and Swift (iOS) were used on the client side for the mobile application. The mobile application developed by Daffodil met all the required functionalities, compliances and performance parameters that were mutually defined in the project roadmap. The highest level of encryption i.e. AES 128 bit encryption was implemented in the application. Managing the market opening and closing timings for aggregating the data on the back-end for closed stocks prices, indices values after the respective market closure etc. were some other features that were delivered.

Some of the key features that we built were:

- Easy Navigation to all Financial Data, Market Watch and Portfolio

- Single Search Bar for stocks, indices etc.

- Online E-KYC for trading account

- Push Notifications for Market News

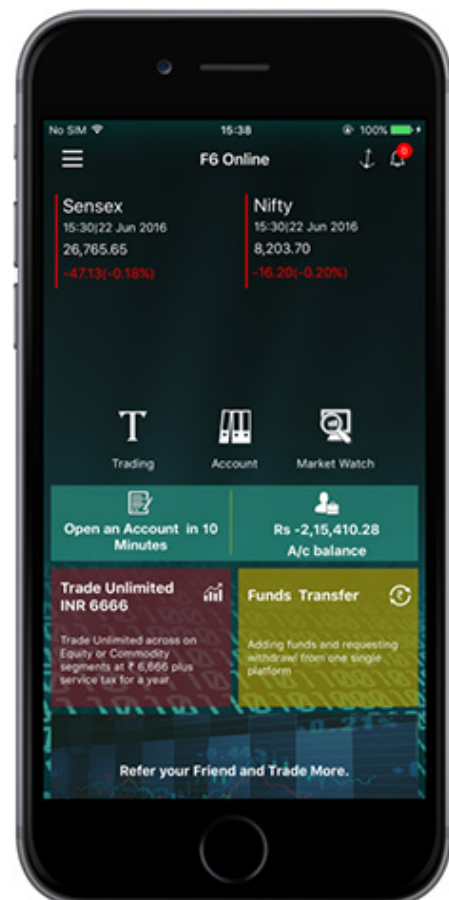- 24x7 Support/Customer Care via live chat rooms

Latest Market Data

- Live streaming of Indices Sensex, Nifty, USD and SGX

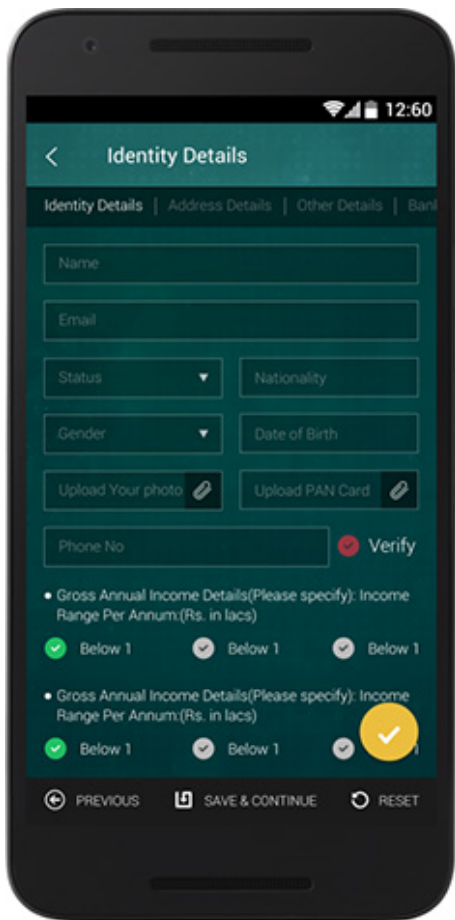- Live streaming of Buy & Sell Prices

- Get live stock quotes

Watch list

- Create Personalized Market Watch list with live data

Account Management

- Manage positions and view account balances on all linked accounts Equity, Currency and Commodity

- Track portfolio in real time

- Get latest 20 transaction history

Funds Transfer

- Pay-in and Pay-out funds from/to the linked bank accounts

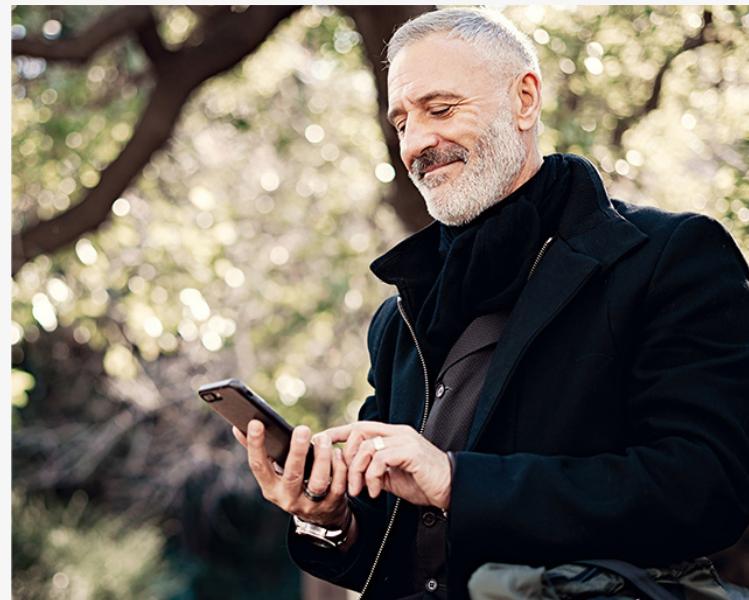- Direct transfer of Refer n Earn in PayU Account

Stock Trading

- Track and modify orders and alerts including saved orders

- Check available funds, Order status and day's positions

- Track portfolio performance

- High level of security for all account and trading data

- Trade online, 24 hours 7 days

Virtual Trading

- Mock Trading Championship with live data

- Daily, Monthly and Yearly leaderboard

Impact

With Daffodil as their software engineering partner, F6 Online has been able to mark their forte in the online stock trading industry. F6 Online was able to launch and market the product in a timely manner as Daffodil ensured that the deliverables were provided on time and with maintaining quality so as to meet all the deadlines. Their presence on the mobile platforms helped F6 Online to increase their market share by 36%, resulting in 56% increase in daily transactions comparative to web-only period. The mobile application also enabled F6 Online to increase stickiness of existing users. F6 Online successfully launched a nation-wide TVC that was targeted to install their mobile application, and resulted in a massive traffic on their mobile app. F6 Finserve was extremely satisfied with the outcome of this project, and the quality of the finished product overall was very high, meeting their expectations.

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Technology Stack

- Java

- Swift

- CakePHP

- MySQL

About Daffodil

Daffodil Software is a software engineering partner to 100+ organizations across the globe and has been helping them in making their software products more robust, teams more productive and processes more efficient. Our ability to look beyond technologies to deliver innovative solutions with scale and speed has been lauded by our clients as well as the tech community worldwide.

Since our inception, we have invested in organic growth; building on our engineering capabilities, organizational processes, and culture required to deliver a truly collaborative ecosystem for solving technology challenges. At the core of Daffodil lies a culture rooted in innovation, learning and a result-oriented mindset.

Deloitte. Technology Fast500 APAC Winner	**Clutch** FIRMS THAT DELIVER	**zinnov ZONES**	**Great Place To Work.** Certified
mongoDB MongoDB Innovation Award	IT Europa Finalist	GoodFirms TOP SOFTWARE DEVELOPMENT COMPANY goodfirms.co	
ISO 27001:2013	CERTIFIED ISO 9001:2015 COMPANY	International Organization for Standardization ISO 20000	

GRANDVILLE, USA

2885, Sanford Ave SW #28585, Grandville, MI 49418 USA

GURGAON, INDIA

9th Floor, Tower B1, DLF SEZ Silokhera, Sector 30, Gurgaon 122001

DUBAI, UAE

Suite No.: 407- 412, Clover Bay Tower, Business Bay, Dubai United Arab Emirates

HISAR, INDIA

6th Floor, Metropolis Mall, Industrial Area, Hisar, Haryana - 125005