

Buzz Shorts — Daily News Feed iOS Full-Stack Application

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Abstract - Developed and published an iOS mobile application on the App Store named Buzz Shorts, as a part of my Internship in a company named Bridging Points Media Private Limited. Buzz Shorts is a news application where users can read news quickly and more easily. The primary idea behind developing this app is to enhance and simplify the daily lives of readers. The app gives news bytes from all over the world, in short format. The app enables the readers with news with a wide range of categories that they would be interested in. The app provides a descriptive news option and the ability to share a specific article across their friends and family. The app also provides an enhanced user-experience and is ad-free with great performance. It is the best, most convenient and free way to get news feed throughout the world. Download the Buzz Shorts app on the App Store to experience a quality service to the readers.

Key Words: iPhone, Xcode, Swift, Firebase, Api, News, Figma.

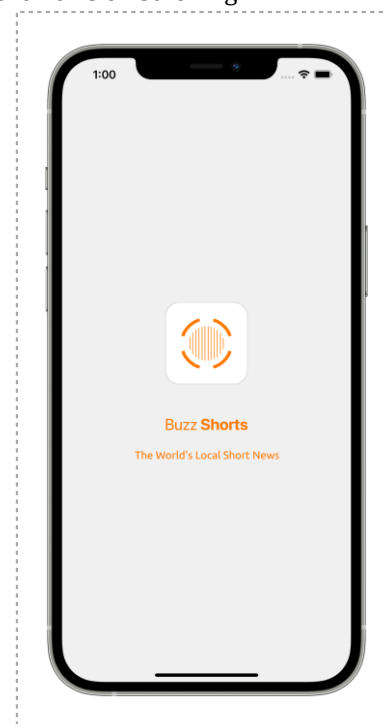
1. INTRODUCTION

The mobile applications are moving into every aspect of our day-to-day lives. With the advancement of iPhones, the iOS applications became an important aspect for local and global connectivity. This application Buzz Shorts, enables users to get daily trending news on various custom categories from popular authors and channels everyday. News applications with lengthy articles and news pieces take up too much time for the user. In order to skip the lines and save time, Buzz Shorts gives quick and easy news in short format. There are a wide range of custom news categories for readers, like Technology, Automobile, Sports, Health, Education, Entertainment, and many more. Readers can choose whatever category they're interested in and read the news. Readers can get a quick gist looking at the news article and can also get a detailed view on clicking on it if they wish. Users can also share a specific news article to their friends and family across several social media platforms. Buzz Shorts is a lightweight, user-friendly and a fast news application that provides good performance and seamless user experience to the readers.

2. BUZZ SHORTS APP

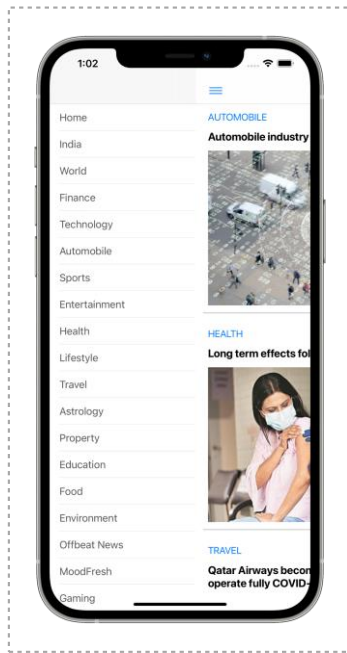
2.1 News Feed

On launching the app Buzz Shorts, users will see the latest news articles on the home screen — News articles showing the news title, news category, picture and the read time for each specific article. Readers can explore more and more news on scrolling.



2.2 Select Categories

Readers have the option to choose the news categories of their interest on the side menu. Buzz Shorts provides a gamut of custom categories like — India, World, Finance, Technology, Automobile, Sports, Entertainment, Health, Lifestyle, Travel, Astrology, Property, Education, Food, Environment, Offbeat News, MoodFresh, Gaming and Miscellany.



2.3 News Bytes

On selecting a specific category, the readers will get the trending news on that category from throughout the world. Buzz Shorts provides news feed in short format enabling the readers to get a wholesome gist on the worldwide news, thereby saving a lot of time for the users.



2.5 Share It

Readers have the ability to share a specific news article to their friends and family real quick on a single tap. The articles can be shared across various social media platforms like — WhatsApp, Telegram, Messenger, Mail, Messages, etc.



2.4 More Description

On selecting a specific news article from any category, the readers will get a detailed description on that news byte. Readers who want to know more details on any specific news article will read through the article, within the corresponding mentioned read time for it.

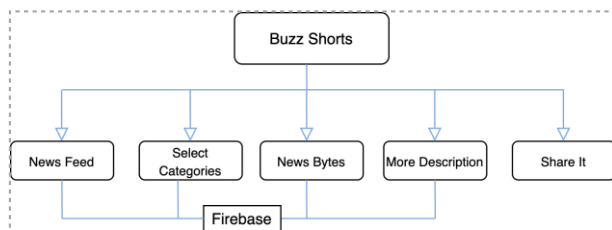


3. ARCHITECTURAL DESIGN

The iOS application Buzz Shorts, is compatible and can be installed on all iPhones with operating system iOS 11.0 or above. The application is developed and built on Xcode (Xcode version 12.0), Apple's integrated development environment for Apple apps. The application is

programmed in Swift (Swift 5.0) and Objective-C, Apple’s native platform programming languages.

The Backend server used for this application is Firebase (Firebase 7.0) — tools like Firebase Database for storing the raw data and records of news feed in the app in json format, Firebase Storage for storing all the media files and images of news feed, and Firebase Analytics to keep a track on the data traffic and database usage. The application’s user interface is designed on Figma, the UI-UX vector graphics editor and prototyping web-based tool for both macOS and Windows.



4. FIREBASE SERVER

Authors from various journals and channels in collaboration with Buzz Shorts, provide the news articles for the app’s news feed. These news articles are uploaded to Firebase. In the News feed, the news articles are fetched from the Backend server Firebase Real-Time Database. In Firebase Database, the data is stored in json format. All the nodes and the data is secured with encrypted ids at every single level of the json tree.

The media files and images are stored in Firebase Storage in their respective news category folders. Each media file has a unique identifier name called an octet stream. The upload date and size of the media file is indicated corresponding to the image, in Firebase Storage. Firebase Storage generates a url for each and every media file that is uploaded and stores the url in Firebase Database.

Firebase is integrated with the iOS app on Xcode using Cocoapods libraries. Firebase pods are installed using commands on the Mac Terminal using homebrew and ruby. On following the set of instructions what Firebase provided for it’s integration with iOS apps in it’s documentation, the pod file will be initialised. On adding the pod commands for Firebase in the pod file and installing the pods on the Terminal, we can make use of all the Firebase functionalities in the iOS app.

5. SPECIFICATIONS

- Swift & Objective-C languages.
- UIKit, Storyboarding & Xib cells for Frontend.
- Firebase Database for News Feed.
- Firebase Storage for Helper Service classes.

- Swift-Firebase callback methods `childAdded()` and `child.observeSingleEvent()` for Decrypting and Reading data from Firebase.
- MVC Pattern programming to connect Frontend & Backend - Custom class Models & Apis.
- Cocoapods for Swift libraries & packages.
- Figma for app UI-UX design.

6. CONCLUSION

Developed and published a news application Buzz Shorts, which enhances and simplifies the daily lives of readers. Buzz Shorts provides the best user experience and performance across all the iOS devices. Buzz Shorts is a unique iOS app which belongs to the first of it’s kind family in the App Store. Buzz Shorts received a large user base on the App Store and a great response from the news readers.

7. REFERENCES

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