

**mira**fra  
TECHNOLOGIES



CASESTUDY

## Overview

Cruises' are the mark of modern luxury, with cool, contemporary design and warm spaces; dining experiences where the ambiance is as important as the cuisine and the amazing service. In addition to visiting all continents, our client also offers immersive cruise tour experiences in Alaska, Australia/New Zealand, Canada, Europe, South America and various exotic locations. By the end of 2016, our esteemed client has a fleet of 25 beautiful ships.

## The Problem

Our client wanted to provide stunning digital way to experience various tour locations - before even set foot board through a hassle free Mobile application for their travellers, allowing the exclusive members to book a modern luxury vacation while you're on the go.

Features Include:

- Book a cruise, get current rates, and hold or complete a reservation
- Search by destination, ship, departure port or sail date
- Discover destinations & ships
- Learn what to pack based on the length of your cruise
- Take a Virtual Vacation by looking at various onboard experiences

## The Challenge

- **Consistent content delivery**

The viewers of our cruise mobile application are spread across different geographies with disparate network environments. The web and mobile application must ensure uninterrupted delivery of content to the subscribers with consistent user experience.

- **Web and iPad application navigation**

One of the key challenges of this project was the navigation structure, since its tab based application with heavy amount of content. The website and the mobile application had to be equally interactive and intuitive, while maintaining a consistent user experience across multiple platforms.

- **Offline Storage**

To provide uninterrupted viewing of data on mobile application, the developed application needed to store all fetched list of cruises, destinations, experience etc., in local DB. So that user can search, browse and skim through the details of all tours even without Internet connection.

- **Efficient display of Resources**

Plenty of High resolution images, high memory documents etc., needs to be fetched, stored and displayed efficiently without hitch on Mobile application.

## The Solution



### Image rendering solution

The rendering of all cruise schedules images was done via SDWebImage -The Open source image rendering UI library. SDWebImage also helped in Asynchronous image downloading with cache support as a UIImageView category. It is also possible to use the async based image cache store independently. SDImageCache maintains a memory cache and an optional disk cache. Disk cache writes operations are performed asynchronous so it doesn't add unnecessary latency to the UI.



### Scalable architecture

The cruise mobile application was architected to be responsive on low memory footprint and low data speed devices to function properly on 3G devices and disparate network environments across the globe.

Stored all data's using core data and designed efficiently using all ORM techniques for efficient way of storing & retrieving data's faster.



### Real-time cruise schedules

RESTful based web services were used to fetch the Cruise Details and other Cruise related data dynamically, without post back. The storyboard-based designed screens were embedded to build the mobile Native application.



## Usability features

Followed the user experience guidelines for mobile UI / UX, we developed a Tab based UI navigation approach was used for various sections of cruise application and various gallery sections were integrated into the application to take the Cruise viewing experience to the next level. Implemented easy caching of images that helps user to experience the smooth scrolling usage on mobile application.



## Information architecture & user experience design

The information architecture (IA) of mobile application was meticulously designed to keep the usability standards high. Tab based approach was used to create the consistent, interactive navigation experience, needed for mobile Application.

## The Result

- **Increased reach to the cruise audience**

One of the key objectives of our client was to provide stunning digital way to experience - before even set footboard for people around the world. The cruise mobile application helped our esteemed client in making it possible by providing exclusive content like Destinations, Cruise, Ships, dining & experience, spa etc., Captains Club, exclusive tour / destination packages and updates to the subscribed users worldwide, adding to the popularity of their services on cruise tours.

- **Uninterrupted data flow**

The website and mobile application served as a dynamic showcase of cruises, several other experiences & destinations of Cruise tour packages, and offered real-time, user-friendly schedules of upcoming tours. Pure mobile Native APIs were used to create uninterrupted flow of data and ease usage flow of application.

- **Rich user experience**

The finished product was visually distinct from the web application of them, creating a completely new and much-improved user experience for the users. Through the developed mobile application, our client Service enabled the users to log in to Cruise mobile application and view customized content of their choice, on the move.

## Technology Stack

- Objective C, Swift, xCode, Analytics, Augmented reality