

Documentation for LifeBoat: Mobile Application



Details

Team name:	Delta
Email:	deltabwh@gmail.com
Country :	India

Background

Hello from Team Delta! We are three undergraduate CS students studying at BITS Pilani, India. LifeBoat is a mobile application we have developed for the Black Wings Hackathon 2021, over a period of two days, Feb 5th to Feb 7th.

The theme for the hackathon is "Social Good", so we thought about what we could do to make a difference in the lives of people around us. Most of the ideas we came up with had already been done in one way or another. Then we came up with something that we realized we have always needed, and decided to create LifeBoat.

None of us had ever built an app before, so this experience was very new to us. We learnt so much and using a low code development platform, we got a taste of what development is all about! We had to think on our feet and collaborate with each other to finish our end product - LifeBoat. The details of the application are specified below.

Purpose of the App

LifeBoat is a mobile application that helps you learn a new, useful and essential life skill everyday.

School is the basis of education but what we are not really taught in school are some basic life skills such as changing a tyre, basic self defense moves, how to perform CPR, etc. Such knowledge is however very important for each individual to have. In a constantly changing environment, having life skills is an essential part of being able to meet the challenges of everyday life. The ability to self-manage is very important. LifeBoat provides a collection of tutorials to learn these skills. The tutorials are easy to read and follow, using a simple scrollable card system. A video lesson is also provided in the end to visually demonstrate what has been taught.

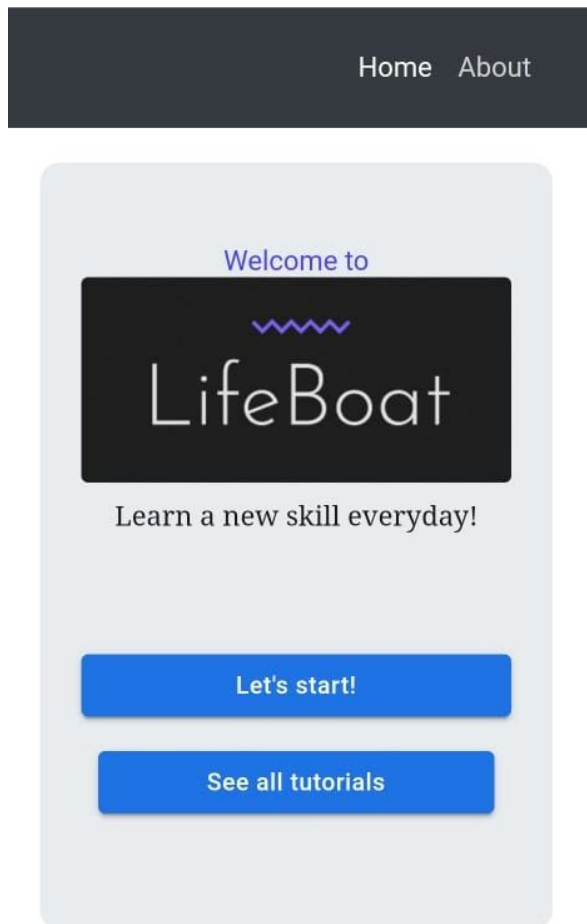
Target audience

The app can be used by individuals of any age, however the main audience we expect would be school and college students (ages 8-20) to gain maximum knowledge out of this application, since it would help them face real-world challenges as they grow up.

Platforms & Technologies

LifeBoat is an Android mobile application. We have used Backendless, a no-code development platform to create it.

Pages and Features



This is the landing page. It displays 2 buttons “Let’s start”, “All tutorials”. In the navigation pane above, there is an About Us section.

A brand new tutorial provided everyday so that you can learn something useful.

A list of all tutorials is also provided so you can go to one of your choice.

Learn Basic Self Defense



Hammer strike

To perform: Hold your key ring in a tight fist, like holding a hammer, with keys extending from the side of your hand. Thrust downward toward your target.

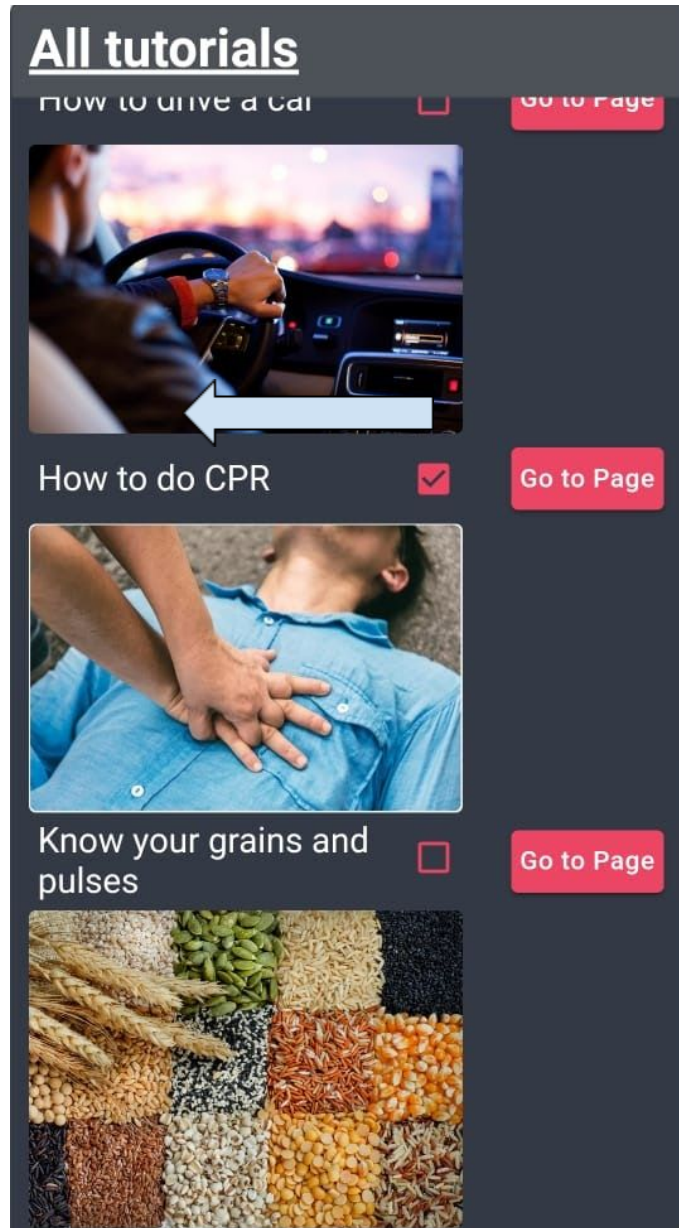
An example of a tutorial page is shown here.

Each tutorial has cards that you can learn from that are easy to read.



Complete tutorial

A video in the end for a visual demonstration of the tutorial.



The 'All Tutorials' page provides a list of all the tutorials in the app, for easy access.

Checkboxes to show which tutorials you have already finished in the 'All Tutorials' page and keep track of your progress.

About Us



LifeBoat is your one stop destination for lifehacks which will come in handy during emergency situations. This app has been made with a motivation to help young adults acquire the necessary skills which will help them in many walks of their lives. We hope that you find this app helpful! Thank you.

The "About Us" page has some information about the purpose of the app, and a list of the team members.

About Us

in many walks of their lives. We hope that you find this app helpful! Thank you.

Team Members

Ayushi R Dubal



Siddhi Parashar

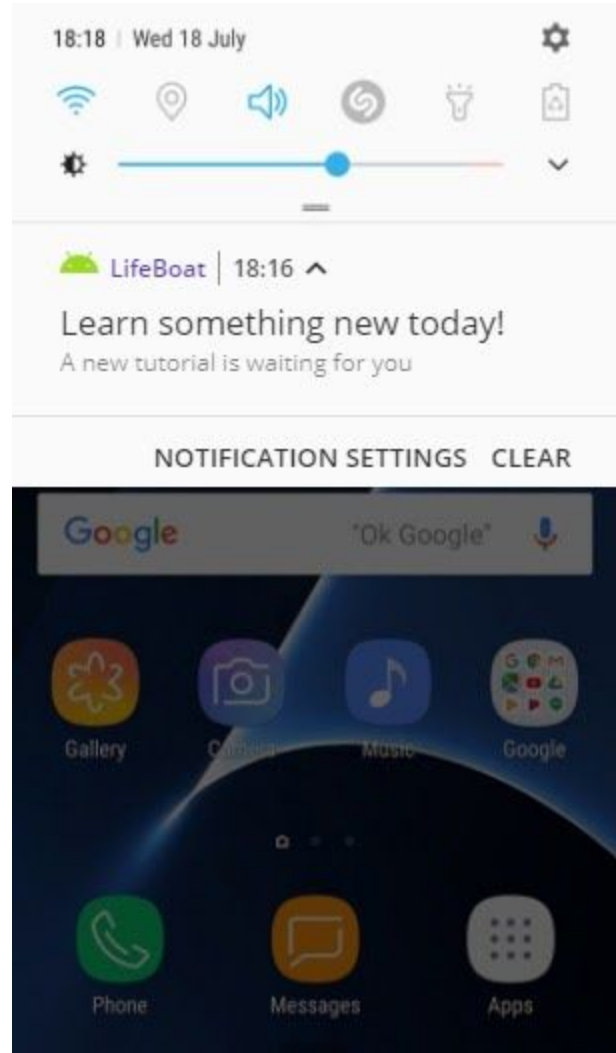
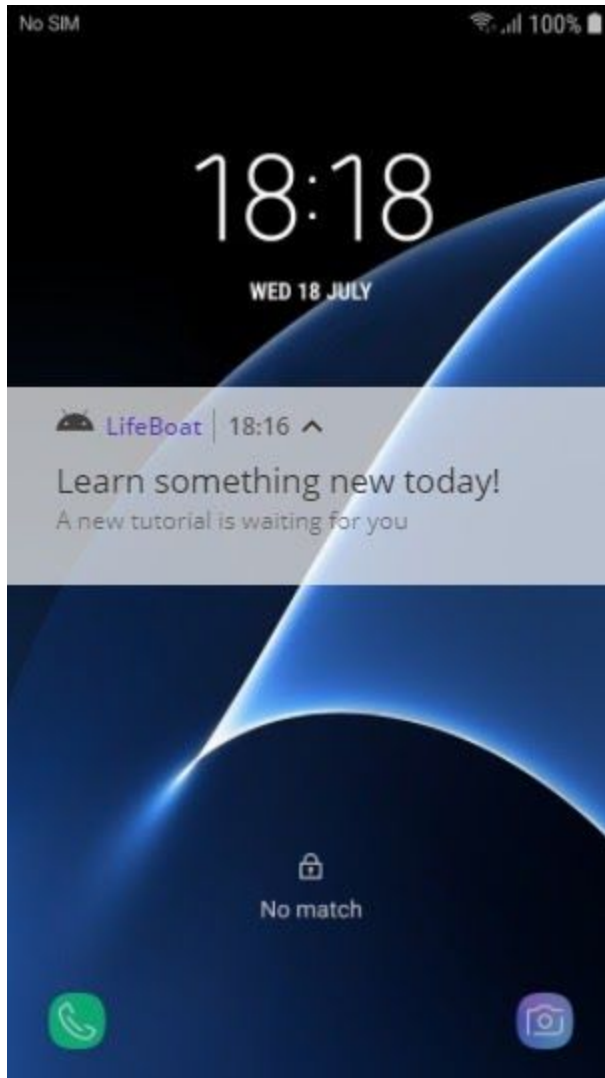


Shikha Bhat



Go Back

Push notifications to remind you to learn a new skill everyday!



API

Our application uses a Data API in the backend, which stores all the tutorials in the form of objects in a relational database table. Information is retrieved by simple SQL type queries from the backend.

BACKEND

FRONTEND

MISSIONS

+ CREATE NEW APP

LifeBoat

Shikha Bhat

Data Management

APP TABLES

allTutorials 7

Tasks 3

SYSTEM DATA

Backendless Cache 7

Backendless Counters 0

DeviceRegistration 0

Loggers 1

Users 0

DATA BROWSER

SCHEMA

PERMISSIONS

REST CONSOLE

CONFIGURATION

New

Delete

Columns

More

Dates in UTC

Search

SQL Search

Real-time

	ACL	TutorialName STRING MAX LENGTH: 250	objectId STRING_ID MAX LENGTH: 36	ownerId STRING	createdAt
<input type="checkbox"/>		SelfDefense	ABF771BB-3454-497A-B2C7-14D8B9C3C5DC		02/07/2021 19:14:23
<input type="checkbox"/>		CPR	AC05EAA7-EAE3-4C89-B3E5-496DF7A4D9EF		02/07/2021 19:14:06
<input type="checkbox"/>		Grains-Pulses	AFA6E577-E027-4AD9-B7D1-156700B6489D		02/07/2021 19:13:49
<input type="checkbox"/>		ChangeBulb	C1EC93E7-16D8-4B1A-8535-6D5D15D32ABE		02/07/2021 19:13:35
<input type="checkbox"/>		Drive	CB2E2DE5-3034-4844-954F-A5D2EBF5DE24		02/07/2021 19:13:09
<input type="checkbox"/>		Laundry	D67BCB08-29C6-4EEE-AEDC-EF213AA35E1E		
<input type="checkbox"/>		ChangeTyre	F1DC23CA-5C8C-481B-B4E0-5E19A1DB3427		

Data for tutorials is stored here.

Page 1 of 1

Items per page: 15 30 50

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allTutorials 7

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SYSTEM DATA

Backendless Cache 5

Backendless Counters 1

DeviceRegistration 0

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Users 0

New

Delete

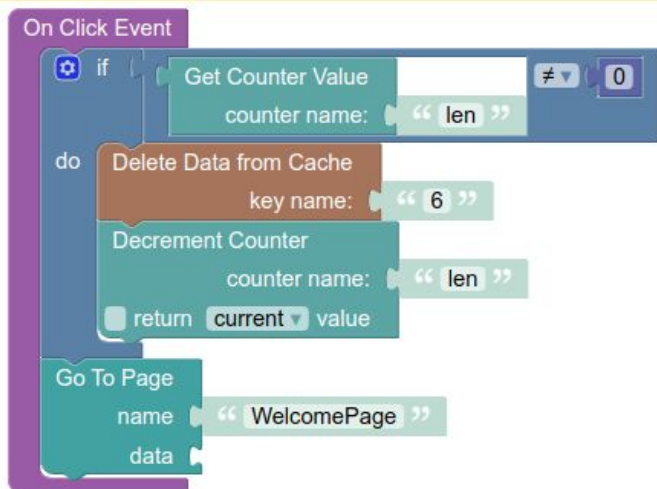
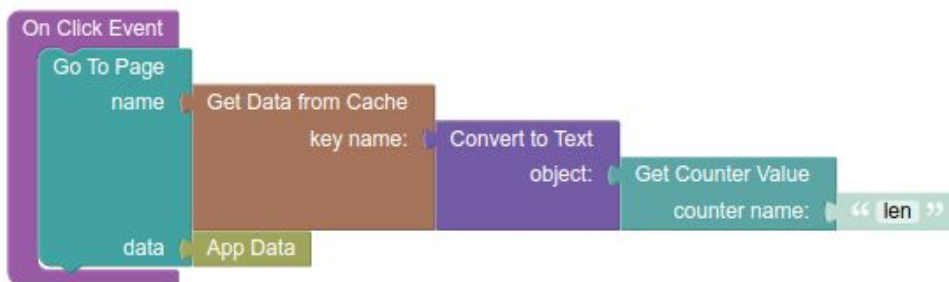
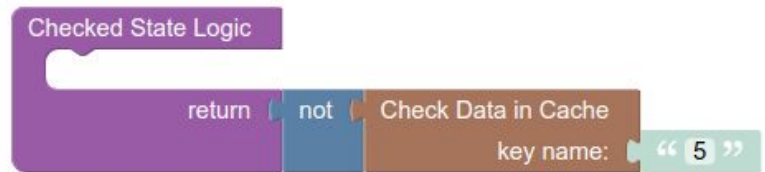
	key STRING	value	expireAt DATETIME
<input type="checkbox"/>	1	GrainsPulses	02/07/2021 19:14:23
<input type="checkbox"/>	2	Drive	02/07/2021 19:14:06
<input type="checkbox"/>	3	Laundry	02/07/2021 19:13:49
<input type="checkbox"/>	4	ChangeBulb	02/07/2021 19:13:35
<input type="checkbox"/>	5	ChangeTyre	02/07/2021 19:13:09

Backendless cache to cycle through the tutorials and get a new one everyday!

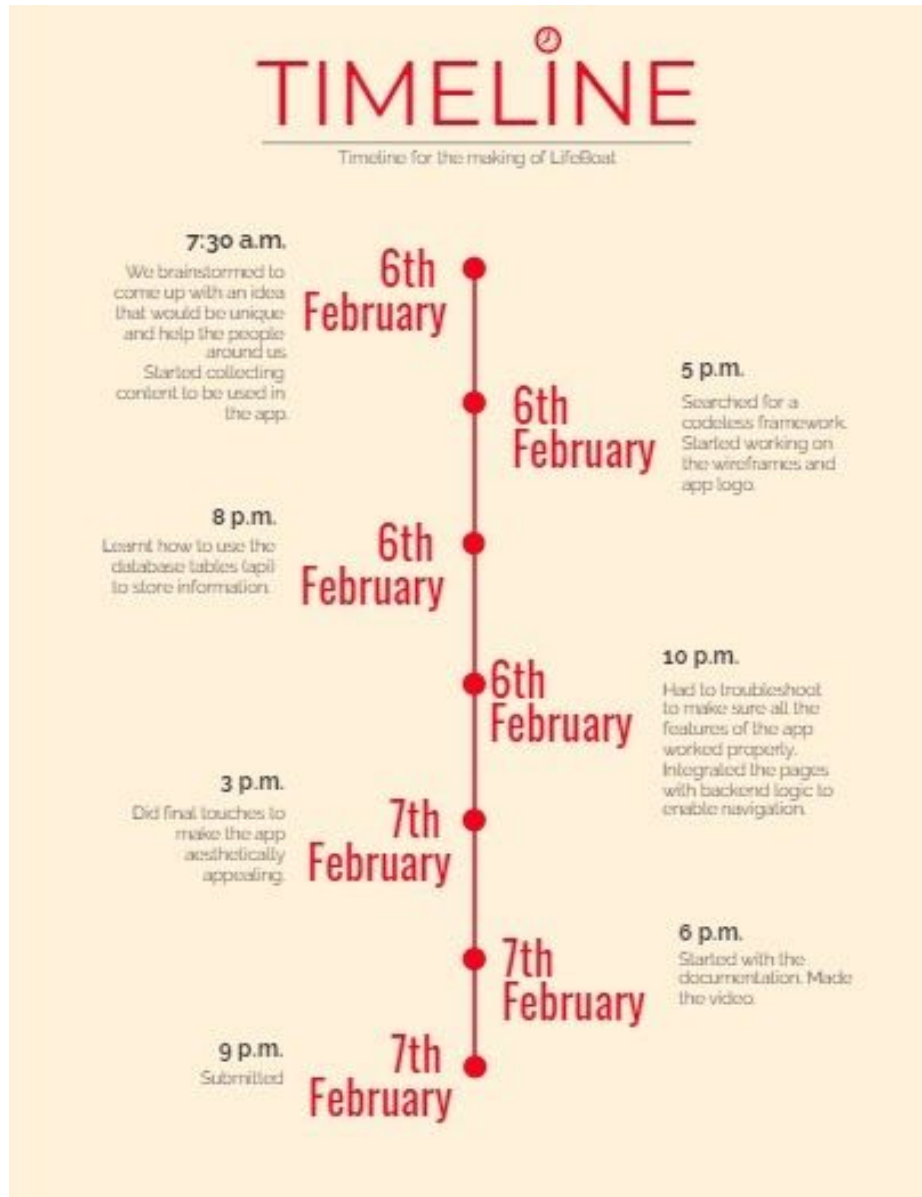
Page 1 of 1

Items per page: 15 30 50

Logic



How LifeBoat was built - The timeline



Future Scope

The future scope of this project is to

- Include as many tutorials as possible in this application and automatically suggest relevant tutorials to the users to enrich their learning experience.
- Automatically retrieve data from the internet to create tutorials relevant to the user.
- Reward the users who are dedicated towards learning new things using a points system.

Contact Persons and Details

This is a list of all the people involved in the project and their contact details.

Team Delta

Sr. no.	Name	Email	College/ Institution
1	Shikha Bhat	shikhabhat1608@gmail.com	2nd year, BITS Pilani, Goa, India
2	Ayushi Dubal	ayushidubal5@gmail.com	2nd year, BITS Pilani, Goa, India
3	Siddhi Parashar	siddhiparashar1@gmail.com	2nd year, BITS Pilani, Goa, India