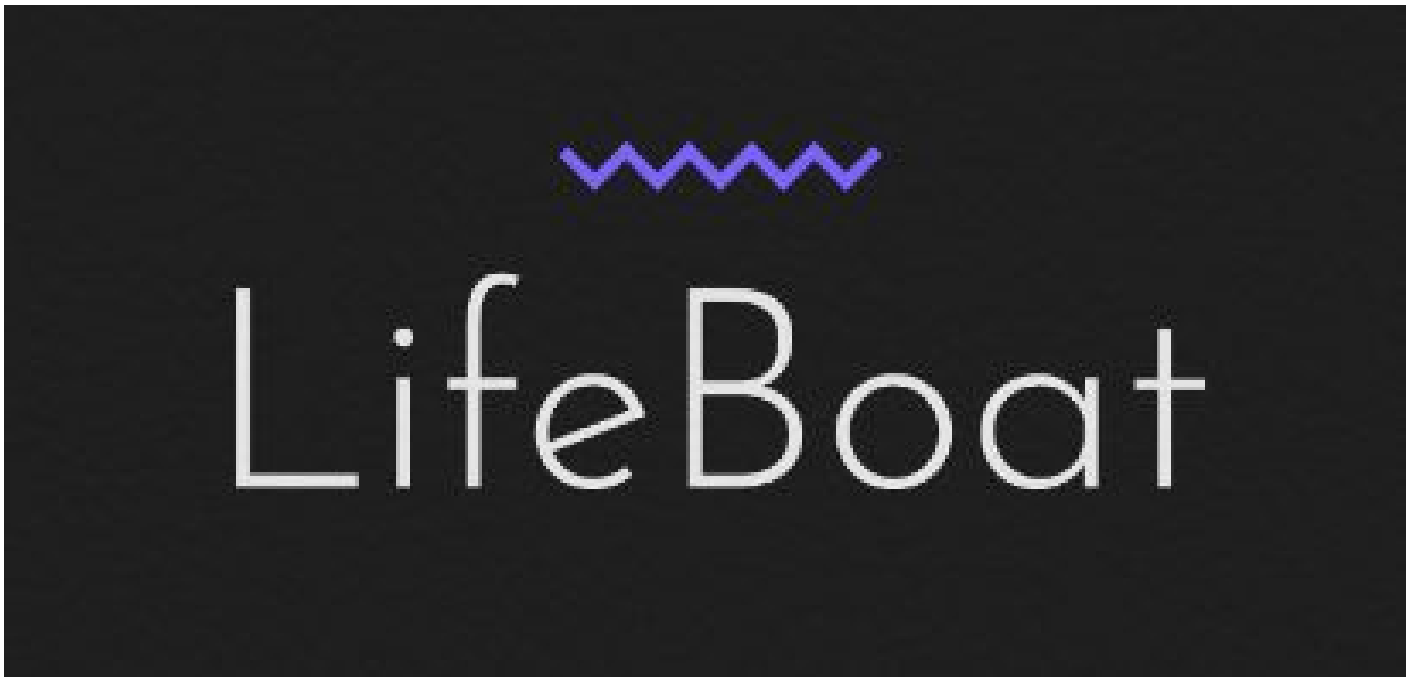
Documentation for LifeBoat: Mobile Application



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.

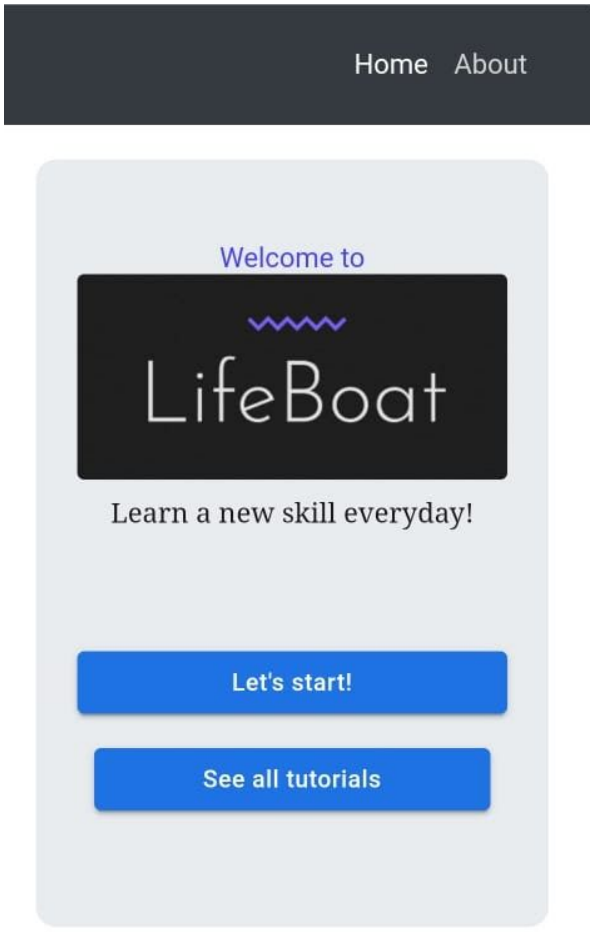
Target audience

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.

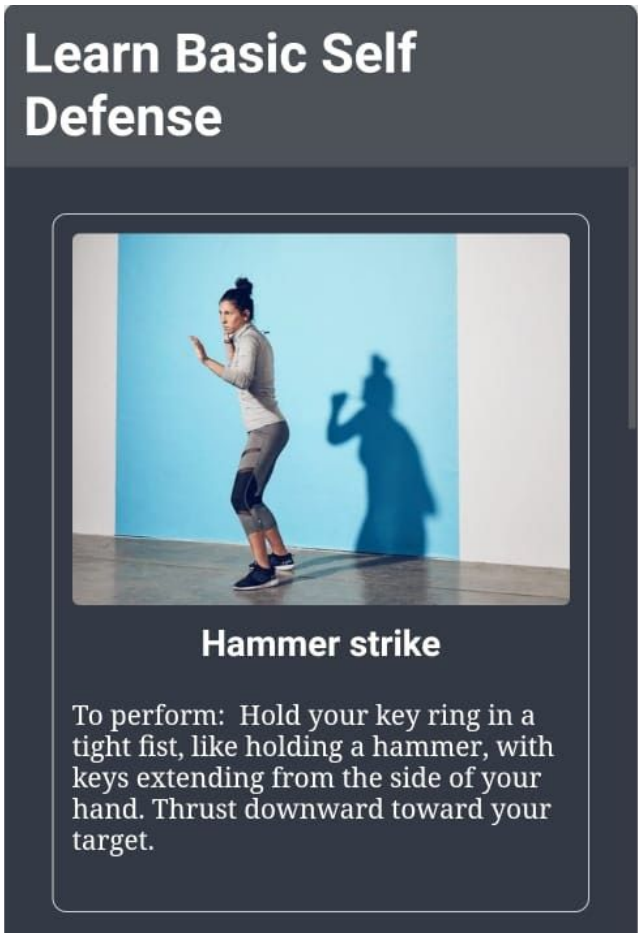
Pages and Features



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.

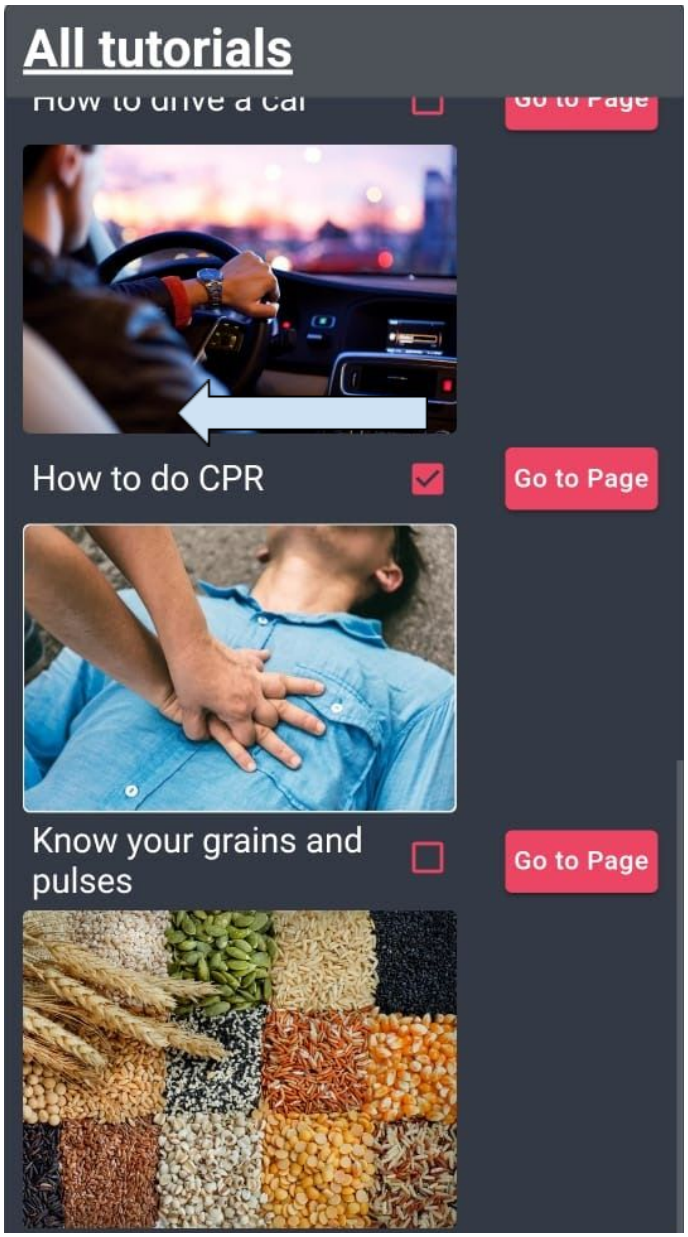
A list of all tutorials is also provided so you can go to one of your choice.



An example of a tutorial page is shown here.

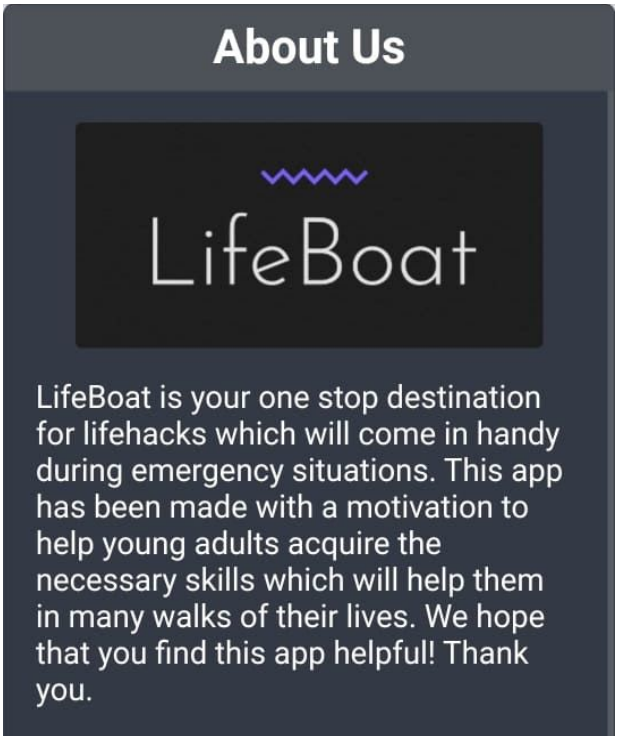
Each tutorial has cards that you can learn from that are easy to read.

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



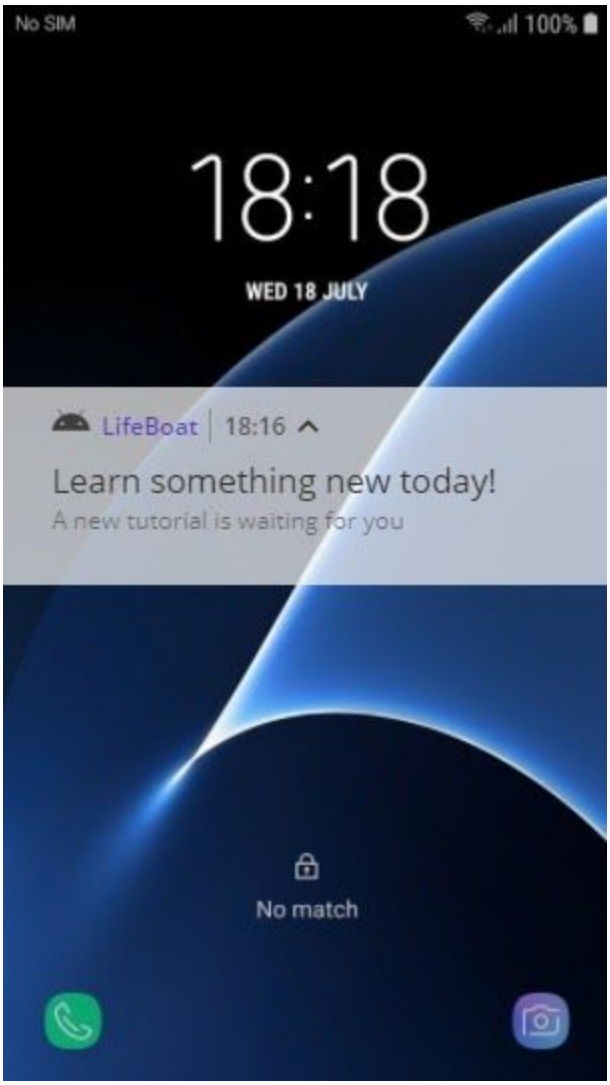
The 'All Tutorials' page provides a list of all the tutorials in the app, for easy access.

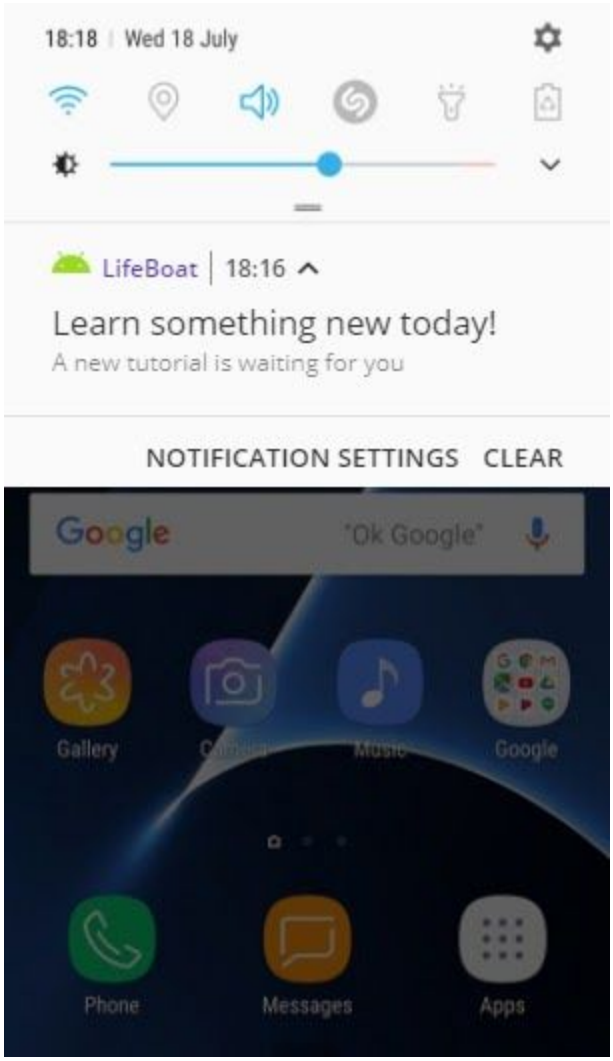
Checkboxes to show which tutorials you have already finished in the 'All Tutorials' page and keep track of your progress.



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

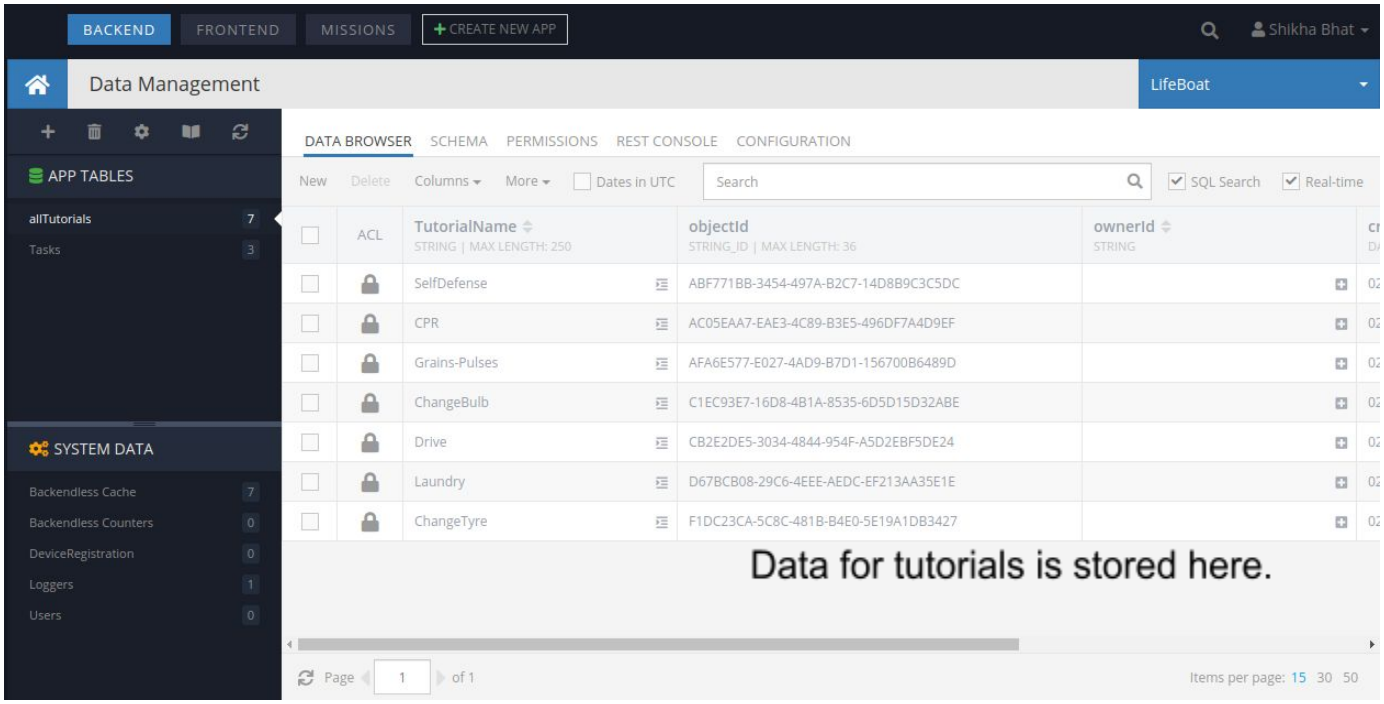
Push notifications to remind you to learn a new skill everyday!

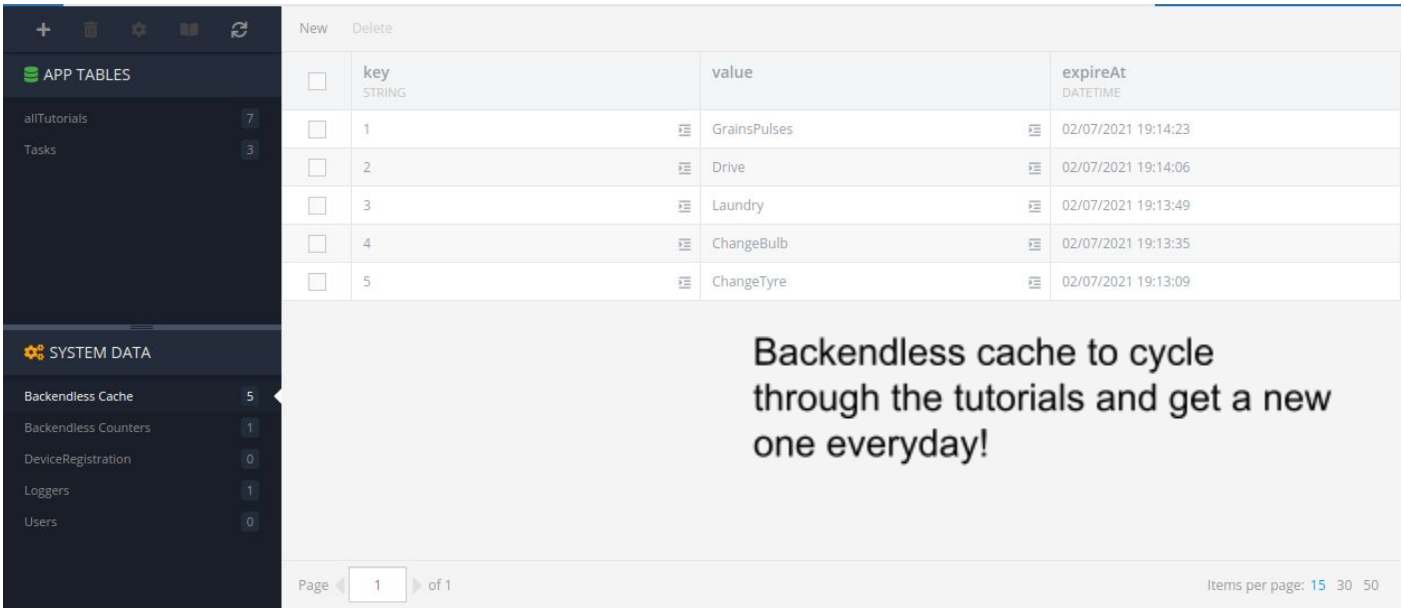




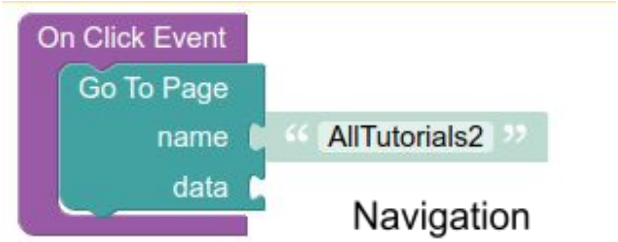
API

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.

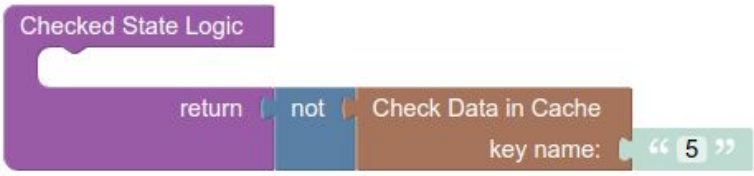




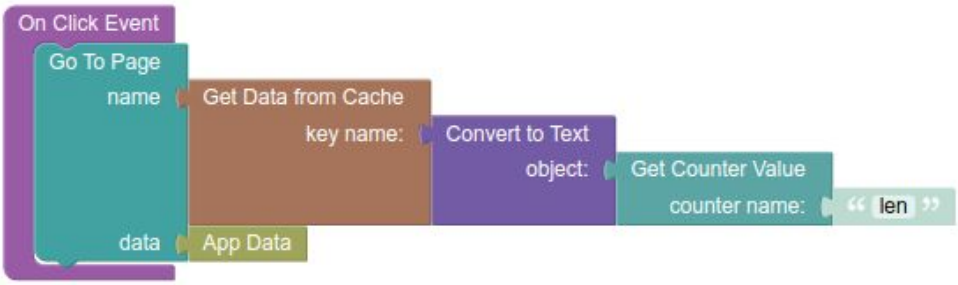
Logic



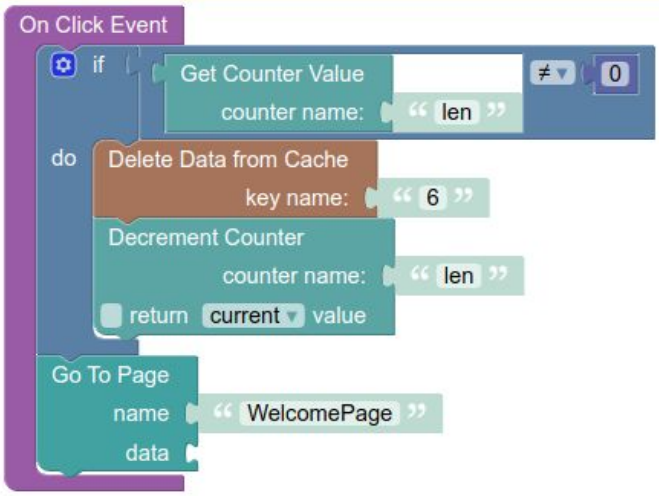
Navigation



Checkboxes

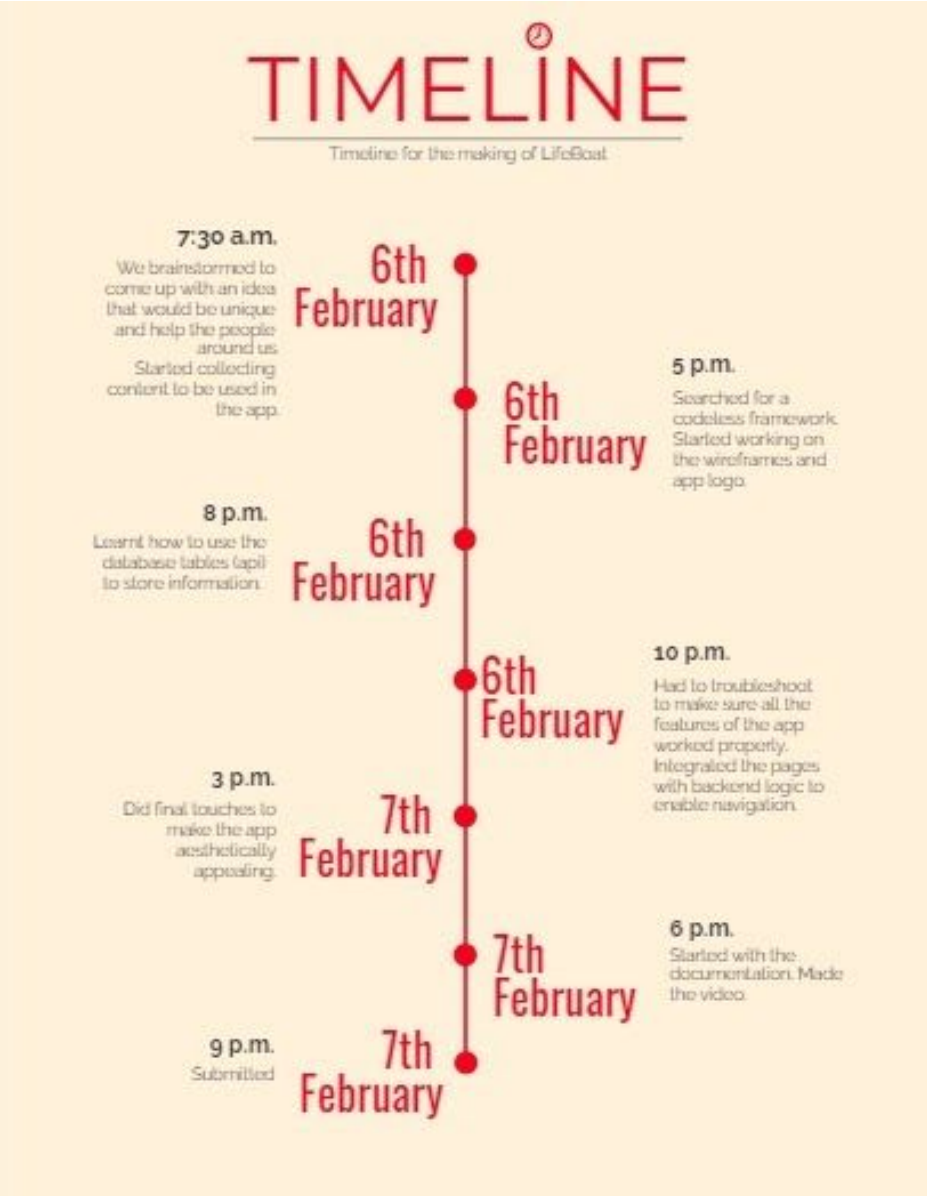


Let's start button



Complete Tutorial button

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
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