Yakka

Documentation

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Easton Area High School

2020-21

Running the App

This mobile application was developed in C# using Visual Studio 2019 and the Xamarin Platform on Microsoft Windows. Contained within the competition submission is a folder named “CompiledApp” that contains a signed APK that was created for Android and iOS phones and emulators. Simply install the APK to your mobile device and run.

Build Instructions

Visual Studio Requirements:

- Visual Studio 2019 Windows Community Edition or Visual Studio for Mac
- Android Platform 28 SDK (Pie) or iOS emulator

In order to build you will need Visual Studio or Visual Studio for Mac. Upon opening the Visual Studio solution it will immediately download all necessary packages from Nuget. You will need to execute a debug version of either the FBLASocialApp.Android or FBLASocialApp.iOS project either on a simulator or by connecting an Android mobile device that has Developer Options and Enable USB debugging turned on.

Project Requirements

Topic: Develop an app for local chapters to manage their chapters.

The app must include:

App Name	Yakka
Designed for Phone/Tablet	Cross-Platform Android / iOS
Mobile-based	Cross-Platform Android / iOS
Licensing and Terms of Use	The Terms of Service Page The Privacy Policy Page

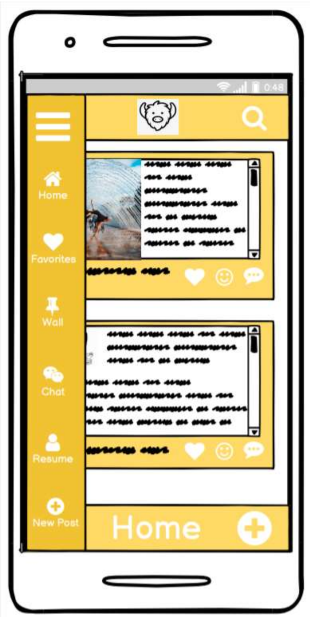
Planning Process

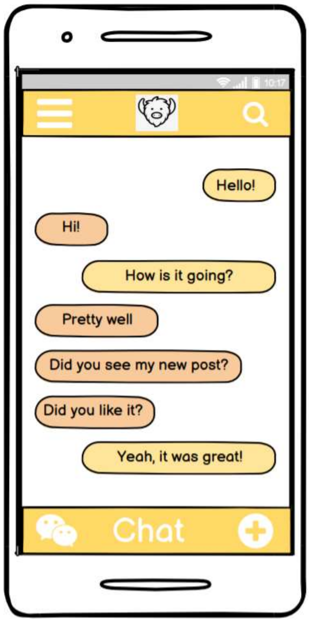
Our planning and development process utilized the Scrum Agile methodology, a common approach in industry.

- We started by looking at what we use for social media and what we would want in an app.

- To organize our project, we used Zenhub, a project management plugin for Github. We made the user stories and official project requirements issues in Github Issues and later organized them with Zenhub.

- One of our first issues was creating mockup page designs, which we did through Balsamiq. These designs gave us an idea of what our app should look like, and what layouts to create in our front end code.




Hello!

Hi!

How is it going?

Pretty well

Did you see my new post?

Did you like it?

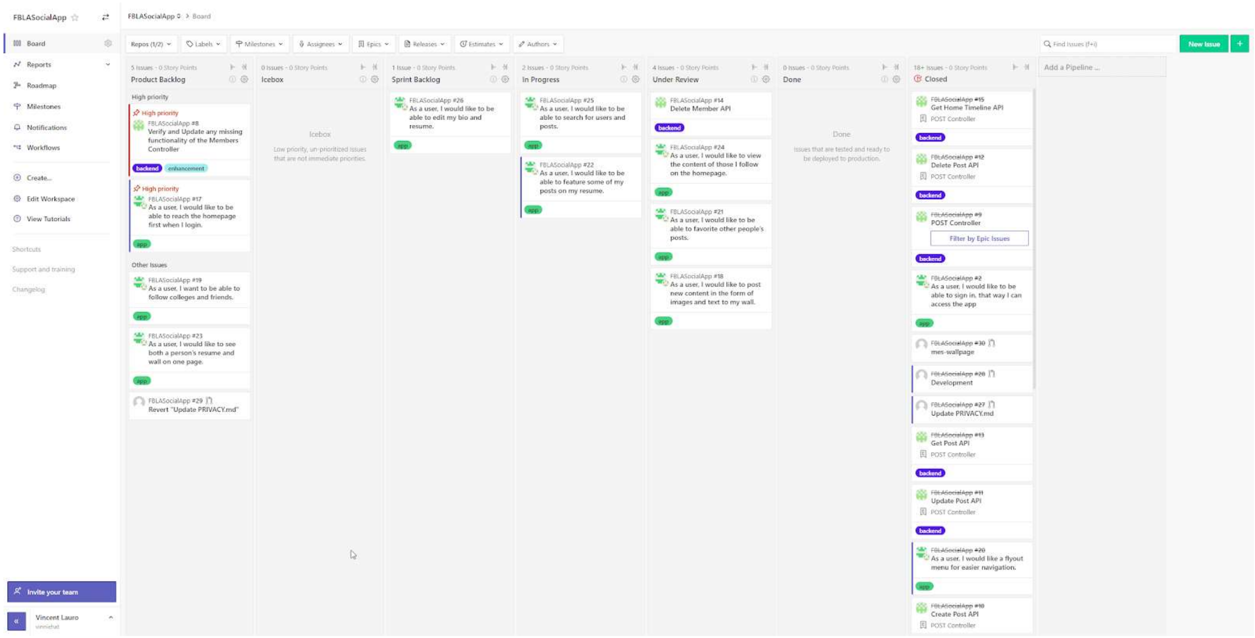
Yeah, it was great!

- We worked on issues in periods of three-week sprints. After each sprint, we held a sprint review to go over what went right, what went wrong, and how we could improve the development process.

- We also held weekly stand-up meetings to track each member’s progress and see where we needed help.

- We added and revised code on different branches in Github, so that we could ensure that code would be error-free before being committed to the master branch.

- At the end of each sprint we would review whether the code was production-ready through the creation of a pull request. While the pull request was open the team reviewed changes to production code. If the team warranted that the code was ready to commit to production, a pull request was accepted and merged into the master branch.



5 Issues - 0 Story Points
Product Backlog

High priority

High priority
FBLASocialApp #8
Verify and Update any missing functionality of the Members Controller
backend enhancement

High priority
FBLASocialApp #17
As a user, I would like to be able to reach the homepage first when I login.
app

Other Issues

FBLASocialApp #19
As a user, I want to be able to follow colleges and friends.
app

FBLASocialApp #23
As a user, I would like to see both a person's resume and wall on one page.
app

FBLASocialApp #29
Revert "Update PRIVACY.md"

0 Issues - 0 Story Points
Icebox

Icebox
Low priority, un-prioritized issues that are not immediate priorities.

1 Issue - 0 Story Points
Sprint Backlog

FBLASocialApp #26
As a user, I would like to be able to edit my bio and resume.
app

2 Issues - 0 Story Points
In Progress

FBLASocialApp #25
As a user, I would like to be able to search for users and posts.
app

FBLASocialApp #22
As a user, I would like to be able to feature some of my posts on my resume.
app

4 Issues - 0 Story Points
Under Review

FBLASocialApp #14
Delete Member API
backend

FBLASocialApp #24
As a user, I would like to view the content of those I follow on the homepage.
app

FBLASocialApp #21
As a user, I would like to be able to favorite other people's posts.
app

FBLASocialApp #18
As a user, I would like to post new content in the form of images and text to my wall.
app

0 Issues - 0 Story Points
Done

Done
Issues that are tested and ready to be deployed to production.

18+ Issues - 0 Story Points
Closed

~~FBLASocialApp #15~~
Get Home Timeline API
POST Controller
backend

~~FBLASocialApp #12~~
Delete Post API
POST Controller
backend

~~FBLASocialApp #9~~
POST Controller
Filter by Epic Issues
backend

~~FBLASocialApp #2~~
As a user, I would like to be able to sign in, that way I can access the app
app

~~FBLASocialApp #30~~
mes-wallpage

~~FBLASocialApp #28~~
Development

~~FBLASocialApp #27~~
Update PRIVACY.md

~~FBLASocialApp #13~~
Get Post API
POST Controller
backend

~~FBLASocialApp #11~~
Update Post API
POST Controller
backend

~~FBLASocialApp #20~~
As a user, I would like a flyout menu for easier navigation.
app

~~FBLASocialApp #10~~
Create Post API
POST Controller

Project Zenhub Pipeline

Our project pipeline was organized into a series of stages, with each stage having a User Story that was entered into the Github Issues tracker.   Issues were moved from stage to stage until they were eventually closed.

1. Product Backlog - All stories we intend to work on for the project
2. Sprint Backlog - The current list of stories that we are focusing on during a particular sprint
3. In Progress - Stories that are actively claimed by a developer on the team and are currently under development
4. Under Review - Stories that have been finished and need to be reviewed by the team
5. Done - Stories that have been reviewed and are now complete
6. Closed - Issues that either are no longer needed or have been merged via PR (Pull Request)

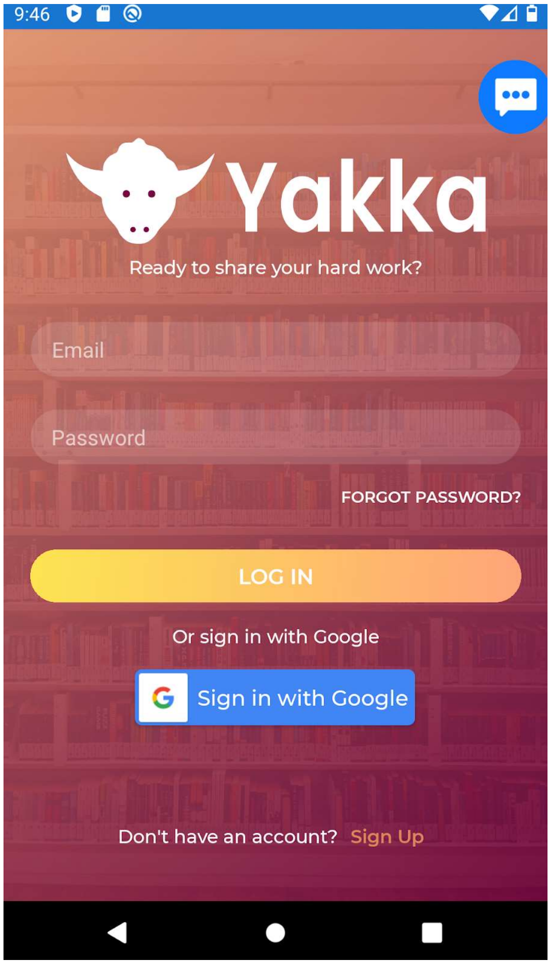
Screenshots

The Login Page

This is the first page users see when they open the app. From here, users may input their login credentials and tap the “LOG IN” button to navigate to the home page.

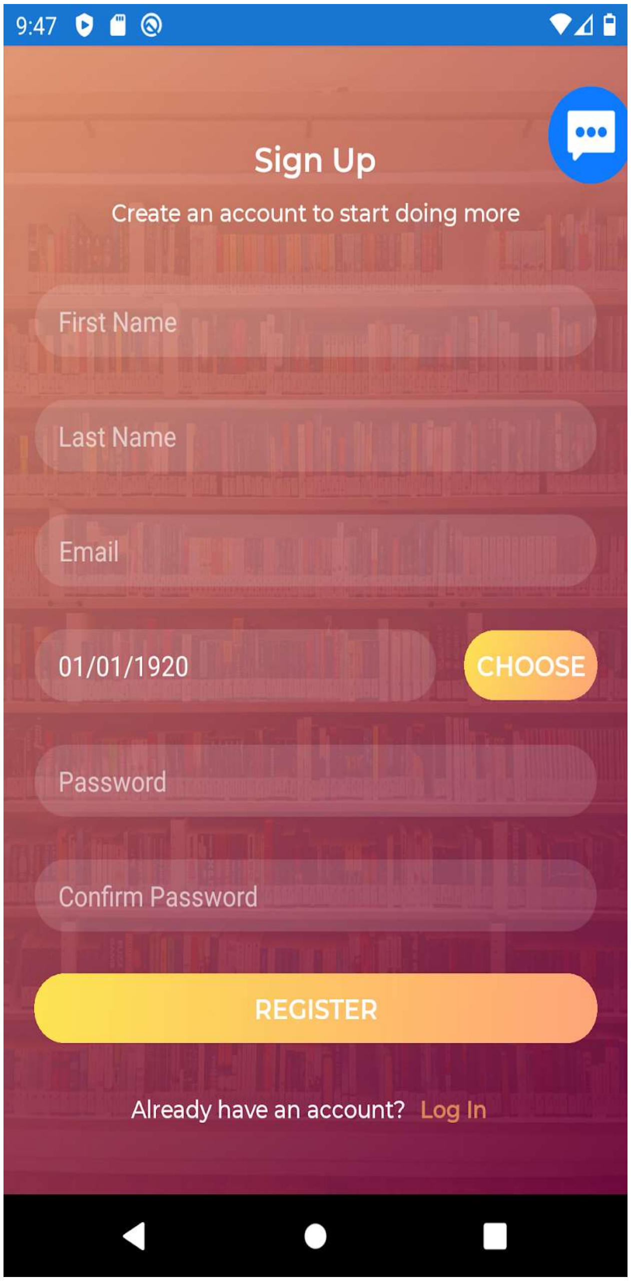
Users may also select the “Sign in With Google” button, which will direct them to a Google login page before loading the home page.

First time users can tap the “Sign Up” button at the bottom to navigate to the sign up page. If a user has forgotten their password, the user may tap the “Forgot Password” button to go to the forgot password page.



The Sign Up Page

On this page, first- users may sign up to create an account and join Yakka. After inputting all their information, users sign up by tapping the “Register” button at the bottom. If they have input information correctly, they will directly navigate to the home page. Each user’s account information is stored in the backend.



Sign Up

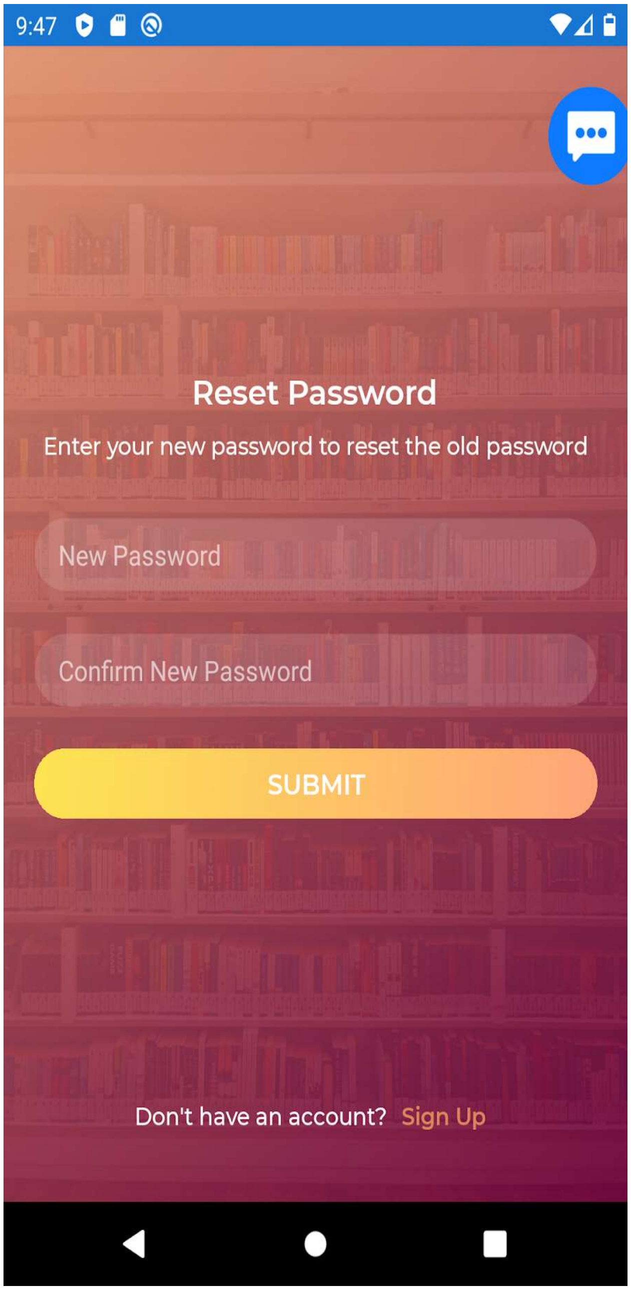
Create an account to start doing more

01/01/1920

Already have an account? Log In

The Reset Password Page

On this page, users may type in their email address to reset their password. An email with a password reset link will be sent to the given email address.

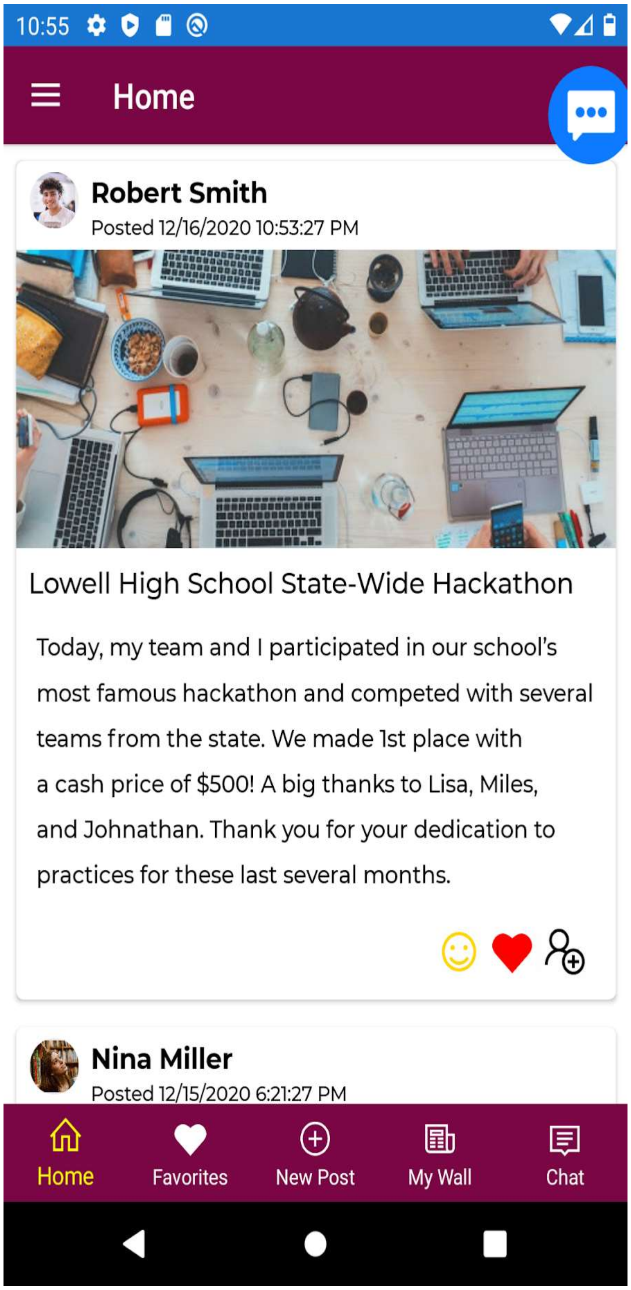


Reset Password

Enter your new password to reset the old password

The Home Page

Upon logging in, users navigate to the home page. Users view their home feed which shows recent posts from people they are friends with. They can cheer and favorite a post as well as follow the author by clicking the buttons on the bottom of each post.



Robert Smith

Posted 12/16/2020 10:53:27 PM

Lowell High School State-Wide Hackathon

Today, my team and I participated in our school's most famous hackathon and competed with several teams from the state. We made 1st place with a cash price of $500! A big thanks to Lisa, Miles, and Johnathan. Thank you for your dedication to practices for these last several months.

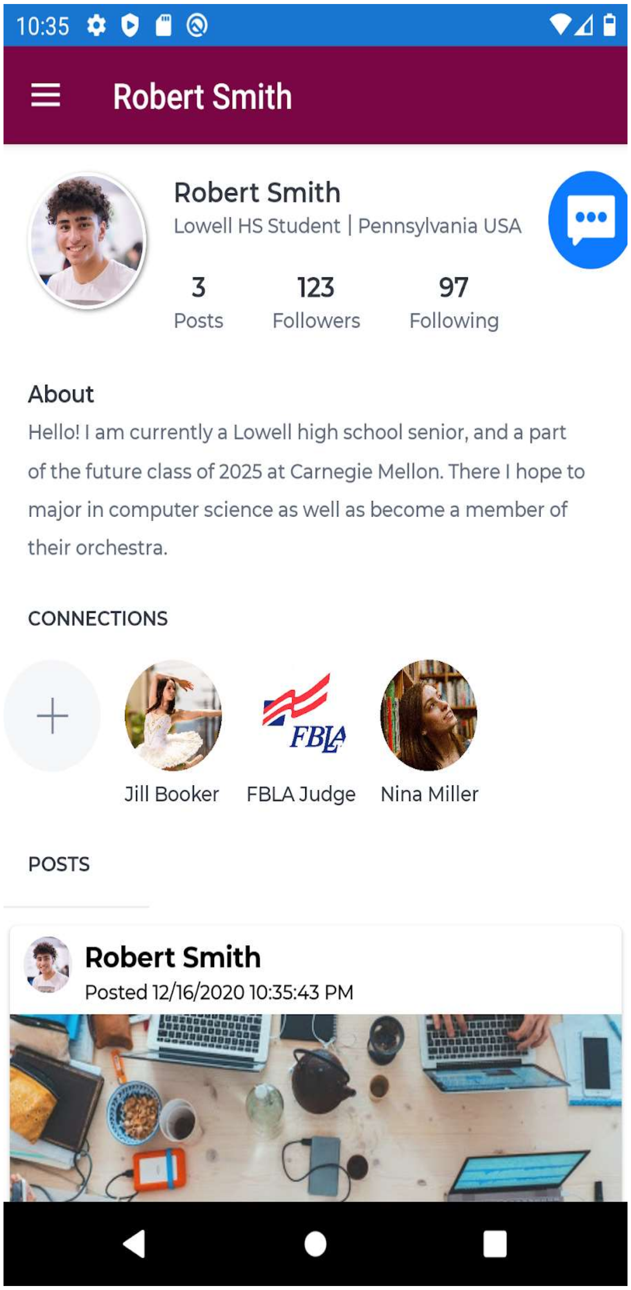
Nina Miller

Posted 12/15/2020 6:21:27 PM

The Friend's Page

By clicking on a post the user is shown the author's wall. A list of all the posts from a user is displayed here.

Also being displayed is the username, location, post count, followers, "About Section", connections, and how many people the user is following.



10:35

Robert Smith

Robert Smith
Lowell HS Student | Pennsylvania USA

3	123	97
Posts	Followers	Following

About

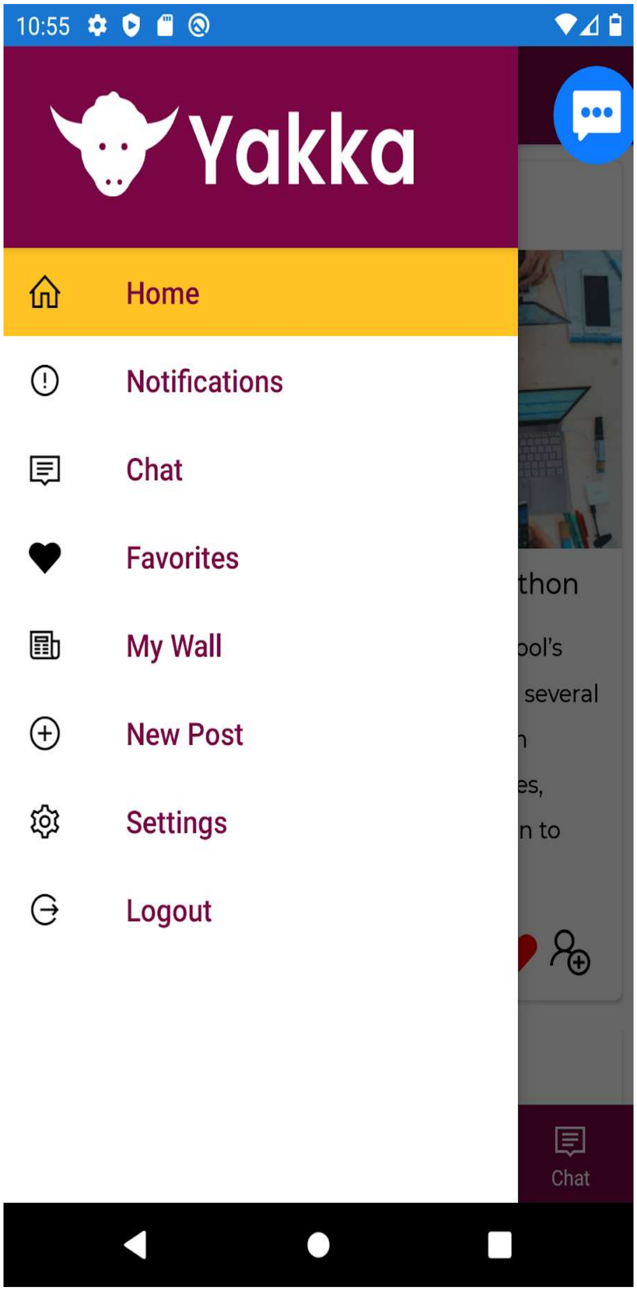
Hello! I am currently a Lowell high school senior, and a part of the future class of 2025 at Carnegie Mellon. There I hope to major in computer science as well as become a member of their orchestra.

CONNECTIONS

Robert Smith
Posted 12/16/2020 10:35:43 PM

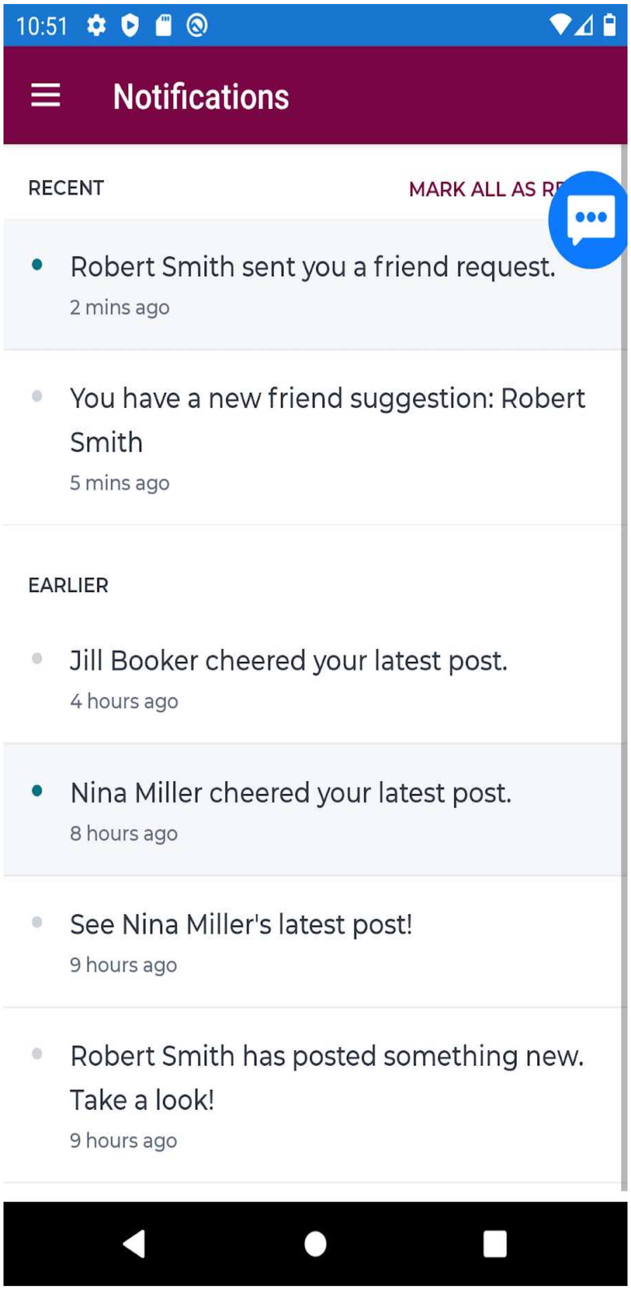
The Flyout Menu

From this menu, accessed through the hamburger icon in the upper left corner, users may navigate to any other page within the app. Users are also able to log out through the menu by tapping the “Logout” button at the bottom of the menu.



The Notifications Page

A list of all recent notifications are listed here, including cheers, follows, friend requests and new posts.



Robert Smith sent you a friend request.
2 mins ago

You have a new friend suggestion: Robert Smith
5 mins ago

Jill Booker cheered your latest post.
4 hours ago

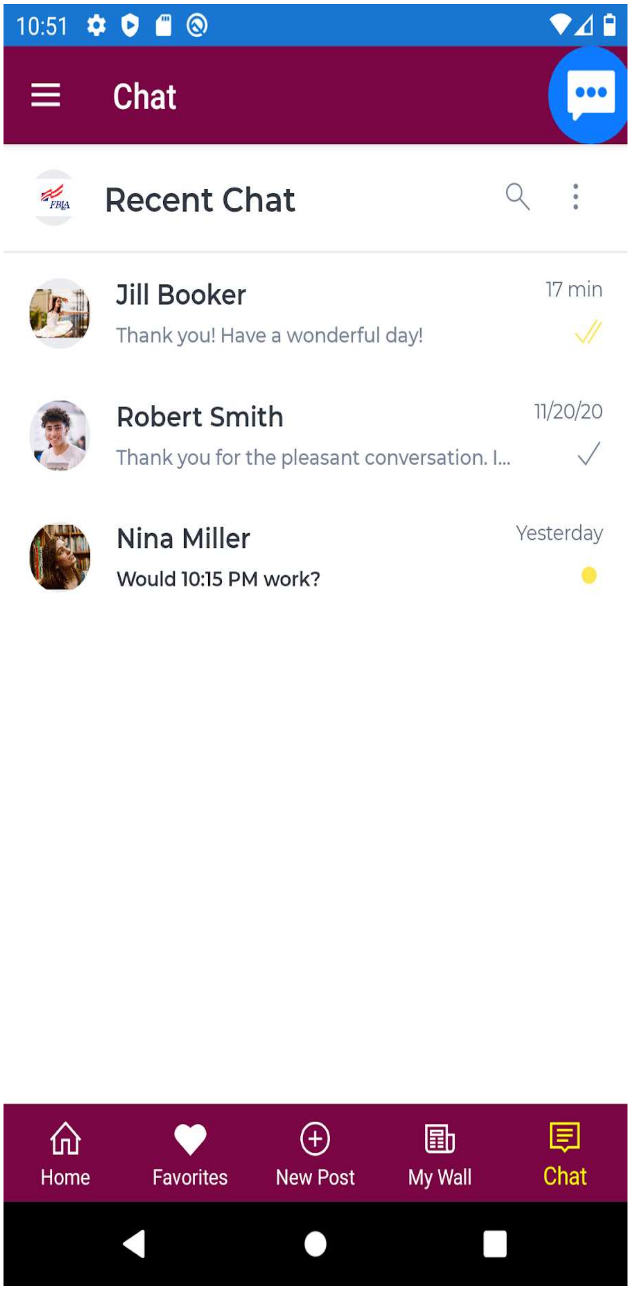
Nina Miller cheered your latest post.
8 hours ago

See Nina Miller's latest post!
9 hours ago

Robert Smith has posted something new. Take a look!
9 hours ago

The Recent Chat Page

A list of all recent chats appear on this page. They allow for quick and easy access to conversations.



Recent Chat

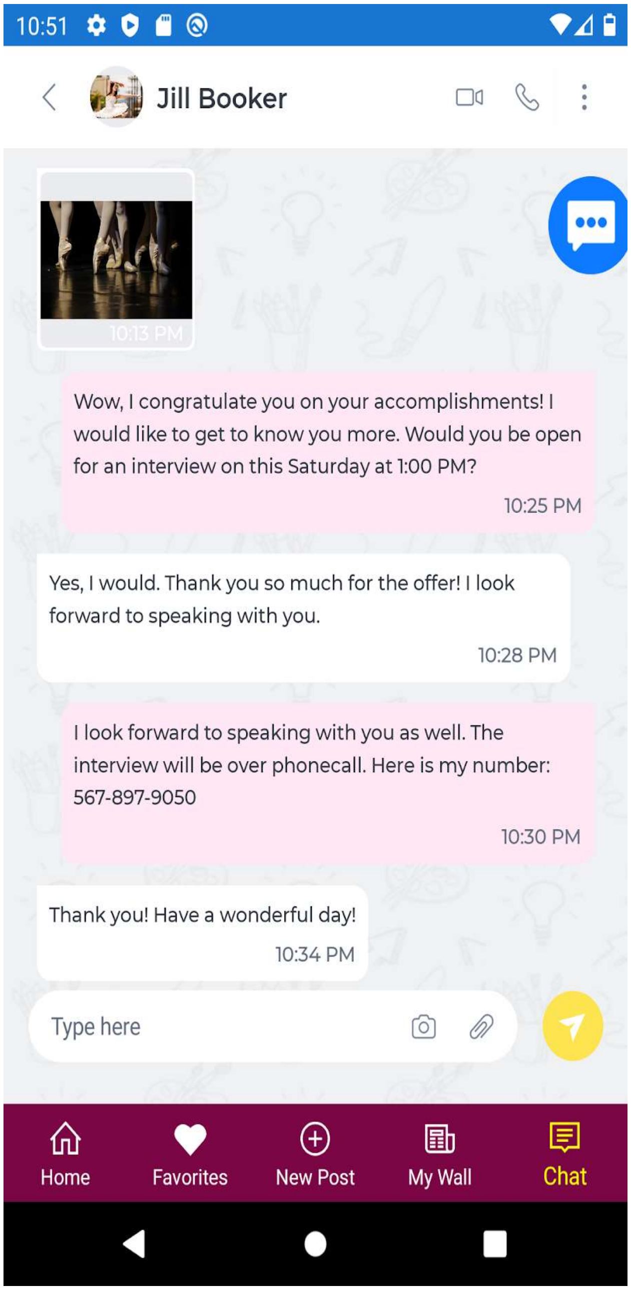
Jill Booker 17 min
Thank you! Have a wonderful day!

Robert Smith 11/20/20
Thank you for the pleasant conversation. I...

Nina Miller Yesterday
Would 10:15 PM work?

The Chat Message Page

A list of all messages between users in a conversation is displayed with a time. You can reply to users with either text, images, or other attachments. You can also video chat or call them.



Wow, I congratulate you on your accomplishments! I would like to get to know you more. Would you be open for an interview on this Saturday at 1:00 PM?

10:25 PM

Yes, I would. Thank you so much for the offer! I look forward to speaking with you.

10:28 PM

I look forward to speaking with you as well. The interview will be over phonecall. Here is my number: 567-897-9050

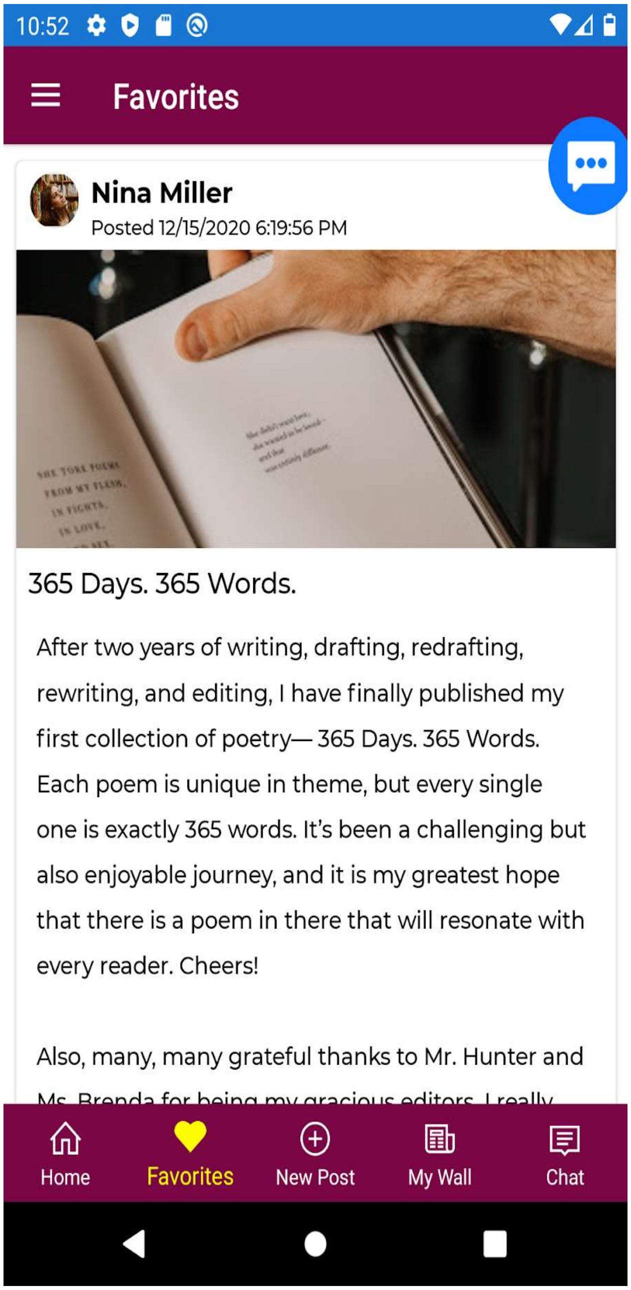
10:30 PM

Thank you! Have a wonderful day!

10:34 PM

The Favorites Page

To view your favorite posts, visit the Favorites Page. The Favorites Page lists all posts that you have favorited.



Nina Miller

Posted 12/15/2020 6:19:56 PM

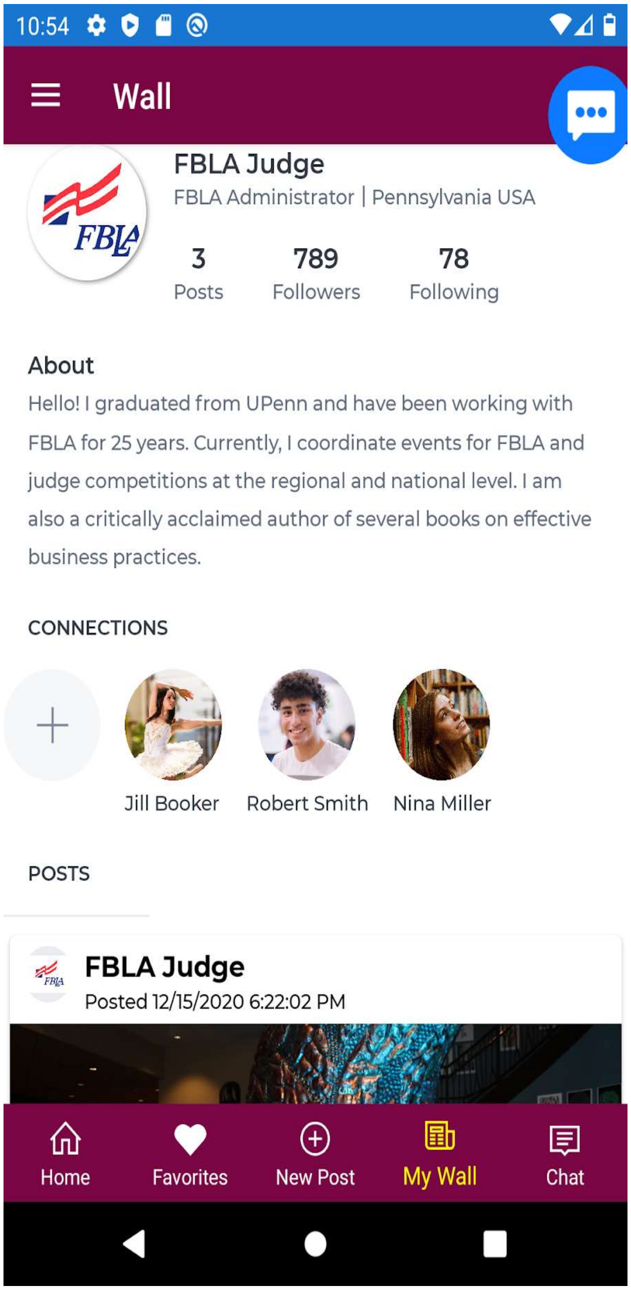
365 Days. 365 Words.

After two years of writing, drafting, redrafting, rewriting, and editing, I have finally published my first collection of poetry— 365 Days. 365 Words. Each poem is unique in theme, but every single one is exactly 365 words. It's been a challenging but also enjoyable journey, and it is my greatest hope that there is a poem in there that will resonate with every reader. Cheers!

Also, many, many grateful thanks to Mr. Hunter and Ms. Brenda for being my gracious editors. I really

The My Wall Page

Similar to the Friend's Wall Page, the My Wall Page displays the same information but for the logged in user.



FBLA Judge

FBLA Administrator | Pennsylvania USA

3	789	78
Posts	Followers	Following

About

Hello! I graduated from UPenn and have been working with FBLA for 25 years. Currently, I coordinate events for FBLA and judge competitions at the regional and national level. I am also a critically acclaimed author of several books on effective business practices.

CONNECTIONS

Jill Booker
Robert Smith
Nina Miller

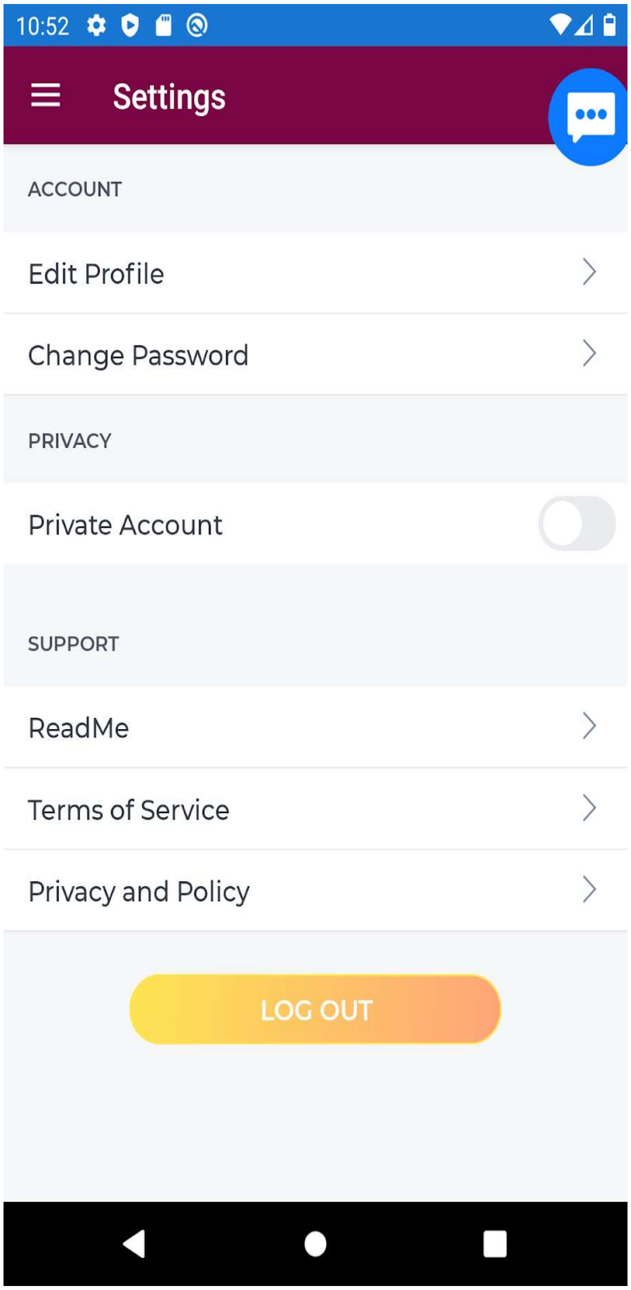
POSTS

FBLA Judge

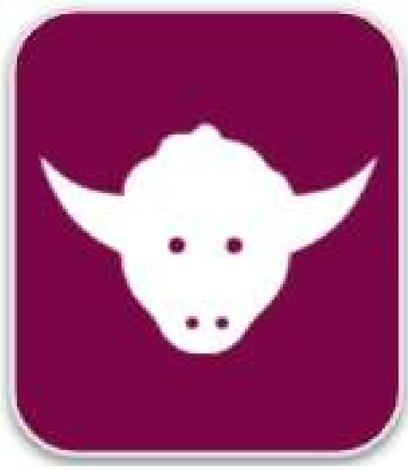
Posted 12/15/2020 6:22:02 PM

The Settings Page

To edit your account, visit the settings page. The settings page allows you to change your password, toggle your account's privacy settings, view any important information about the app, and logout.



App Logo



The application icon, a yak, is a symbol of perseverance and endurance, qualities that are integral to students aspiring to achieve. The yak icon also comes from the name of the app, Yakka, which means “hard work.” We want our app to aid students as they delve into their interests and search for higher education as well as create a supportive online community for student work.

Resources Used

Menu Icons from Icons8 - https://icons8.com/

Background Image from Pexels - https://www.pexels.com/

Font Awesome - https://fontawesome.com/

Pixabay - https://pixabay.com/

Unsplash - https://unsplash.com/

Software and Services Used

GitHub - https://github.com/

Github is an online source hosting service based around the Git version control system. We utilized Github to store source code revisions during this project.

ZenHub - https://zenhub.com/

ZenHub was used to create a product backlog, set goals and assign tasks to assure that we met the deadline and that all team members new their responsibilities.

GitKraken - https://www.gitkraken.com/

Gitkraken was utilized to manage code revisions, resolve merge conflicts, and test experimental branch features.

Instabug - https://instabug.com/

We utilize Instabug to provide comprehensive bug reporting and in-app feedback from our users during beta testing. Instabug automatically attaches steps to reproduce the bug, network request logs and view hierarchy inspections with each bug report. It also allows users to record videos demonstrating their problem.

Microsoft Visual Studio 2019

IDE for developing Xamarin.Forms applications in C#

Balsamiq - https://balsamiq.com/

Balsamiq was used to create wireframes and UI mockups so that we had a reference to work off of.

Additional Software Components

Newtonsoft.Json by James Newton-King - https://www.nuget.org/packages/Newtonsoft.Json/

Json.NET is a popular high-performance JSON framework for .NET

Microsoft.AppCenter by Microsoft - https://azure.microsoft.com/en-us/services/app-center/

This package contains the basic functionalities that all App Center services use to communicate with the backend, including reports on analytics and crashes.

MonkeyCache by James Montemagno - https://github.com/jamesmontemagno/monkey-cache

A simple caching library to cache any data structure for a specific amount of time in any .NET application. Additionally, offers simple HTTP methods for caching web request data.

JSON Web Tokens(JWT) by Auth0 - https://jwt.io

Authentication system using tokens creating a secure way to access information and data.

Xamarin

Xamarin.Essentials by Microsoft - https://www.nuget.org/packages/Xamarin.Essentials/

Xamarin.Essentials: a kit of essential API's for your apps

Xamarin.Forms by Microsoft - https://www.nuget.org/packages/Xamarin.Forms/

Build native UIs for iOS, Android, UWP, macOS, Tizen and many more from a single, shared C# codebase

Xamarin.FFImageLoading by Daniel Luberda, Fabien Molinet - https://www.nuget.org/packages/Xamarin.FFImageLoading/

Xamarin Library to load images quickly and easily

Syncfusion

Syncfusion Essential UI Kit for Xamarin by Syncfusion Inc. - https://www.syncfusion.com/essential-xamarin-ui-kit

This Essential UI Kit repository contains elegantly designed XAML templates for Xamarin.Forms apps. These templates are compatible with Android, iOS, and UWP platforms, and use the MVVM design pattern to provide trouble-free integration.

Syncfusion.Xamarin.Core by Syncfusion Inc. - https://www.nuget.org/packages/Syncfusion.Xamarin.Core/

This package contains common classes and interfaces that are used in other Syncfusion Xamarin UI controls

Syncfusion.Xamarin.SfListView by Syncfusion Inc. - https://www.nuget.org/packages/Syncfusion.Xamarin.SfListView/

Syncfusion ListView for Xamarin.Forms is a feature rich list control that renders a set of data items with views or custom templates. It has many features like grouping, sorting, filtering, paging, swiping, multiple selection, dragging and dropping, and layout types. This control has also been optimized to work with large amounts of data.

Syncfusion.Xamarin.SfComboBox by Syncfusion Inc. - https://www.nuget.org/packages/Syncfusion.Xamarin.SfComboBox/

The Syncfusion Combo Box for Xamarin.Forms is used to select an item by typing a value or selecting a value from the list.

Syncfusion.Xamarin.Buttons by Syncfusion Inc. - https://www.nuget.org/packages/Syncfusion.Xamarin.Buttons/

The Syncfusion Buttons for Xamarin.Forms is a custom button control with UI customization, toggle states, and theme support. You can set icons,custom content, background images and corner edge radii and customize the appearance for different visual states using the visual state manager.

Syncfusion.Xamarin.Cards by Syncfusion Inc. -
https://www.nuget.org/packages/Syncfusion.Xamarin.Cards/

Syncfusion Cards for Xamarin.Forms provides a perfect way to display content in an intuitive way.

Syncfusion.Xamarin.SFBadgeView by Syncfusion Inc. -
https://www.nuget.org/packages/Syncfusion.Xamarin.SFBadgeView/

Syncfusion BadgeView control for Xamarin.Forms is a notification control consists of small shapes such as circle and rectangle which contain a number or message. It is used to show the notification count, messages and status of something. It has key features such as animation, predefined shapes and badge color types. The position of the control can be easily customizable.

References

- https://github.com/eahs/FBLAManager
- “FBLA-PBL.” FBLA-PBL, www.fbla-pbl.org/.
- https://www.fbla-pbl.org/fbla/competitive-events/