



Air Force ROTC Smartphone Application

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Introduction

This project is a dual-platform application for iOS and Android mobile devices developed to aid with military training, physical training, professional development, and personal organization of AFROTC cadets. This application will provide a simple interface for cadets to use to stay informed and connected to the AFROTC program at Detachment 475, University of New Hampshire.

Project Goals

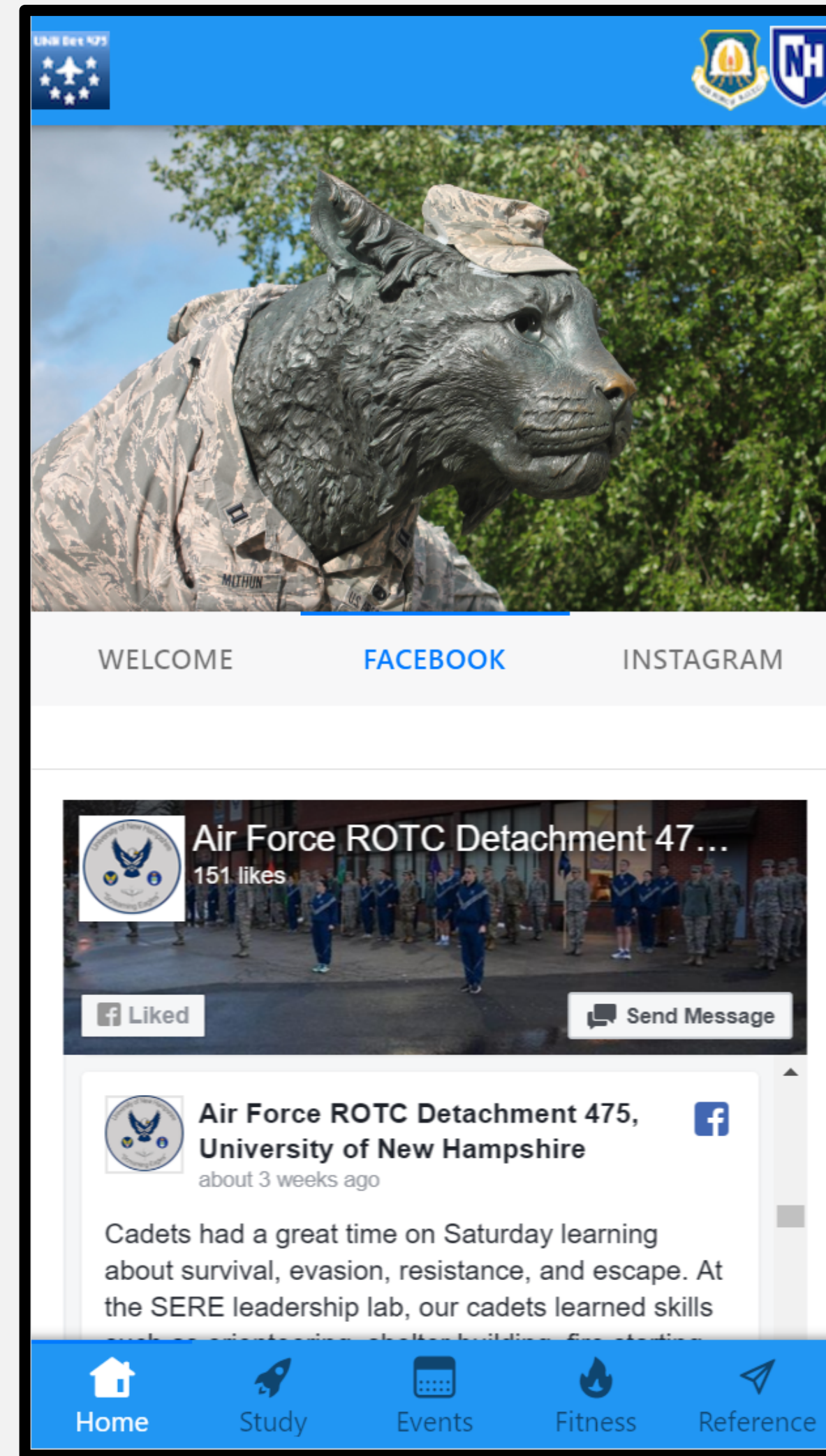
- ✈ To create an easy-to-use app for the UNH AFROTC program.
- ✈ To create the app using open-source software, creation tools, and third-party features.
- ✈ Simple coding for easy app maintenance for future modifications and upkeep by AFROTC cadets.

Features

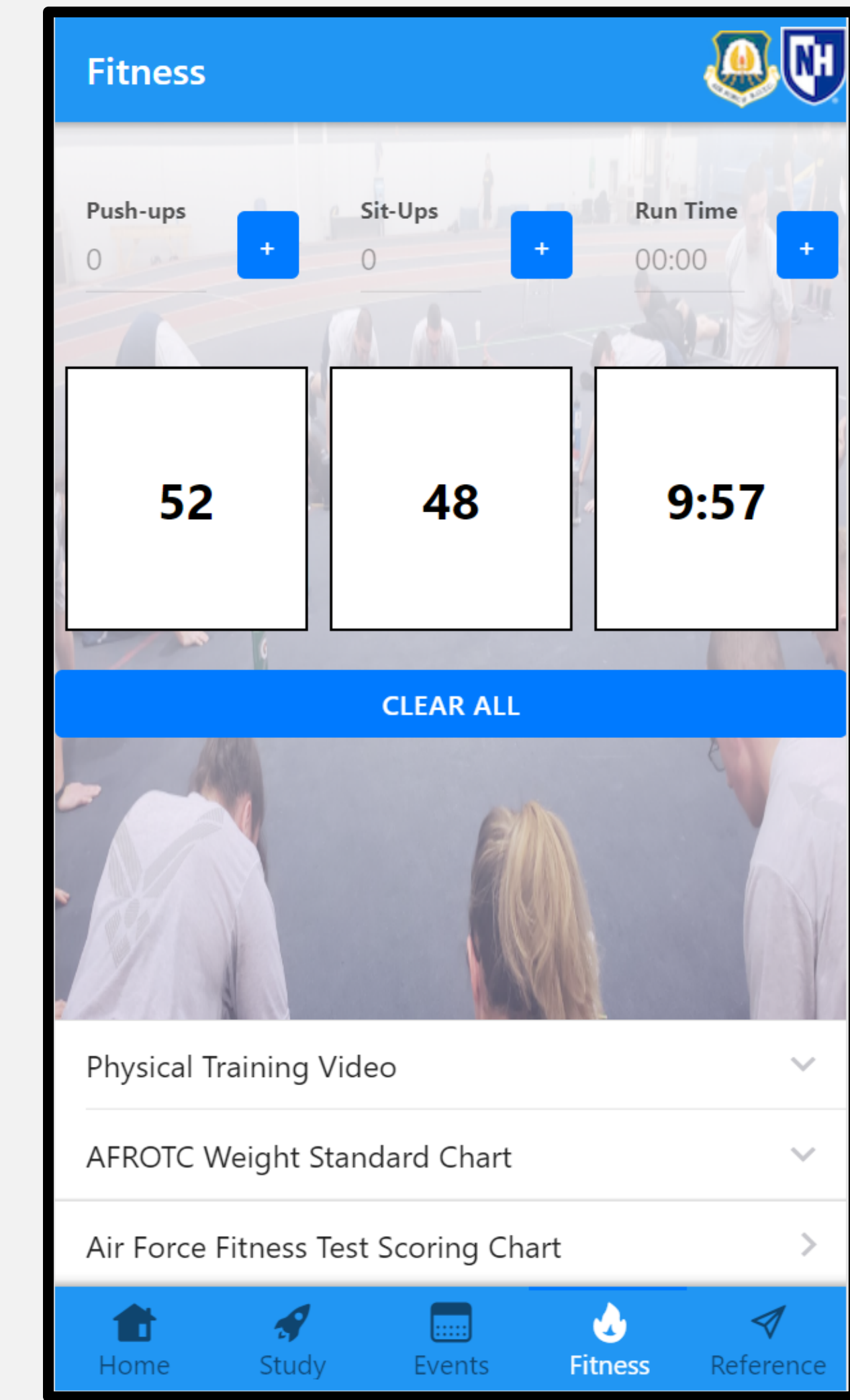
- ✈ **Home** – Dynamic slideshow, RSS feeds
- ✈ **Study** – Static textual content with images and embedded videos
- ✈ **Events** – Google Calendar with upcoming events, notepad functionality
- ✈ **Fitness** – User-input fitness tracker, fitness videos, fitness standards reference
- ✈ **Reference** – External link resources

Development

- Initial planning for the app visuals, functionality, and navigation concepts were built using *Wireframe* and *AdobeXD*.
- Intermediate app development explored development with *Microsoft Visual Studio* with *Apache Cordova*.
- The final development iteration of this app implements *Node.js* and *Framework7* which uses HTML, CSS, and JavaScript along with native templates and tools for hybrid, dual-platform app support and functionality.



Homepage



Fitness Tracker

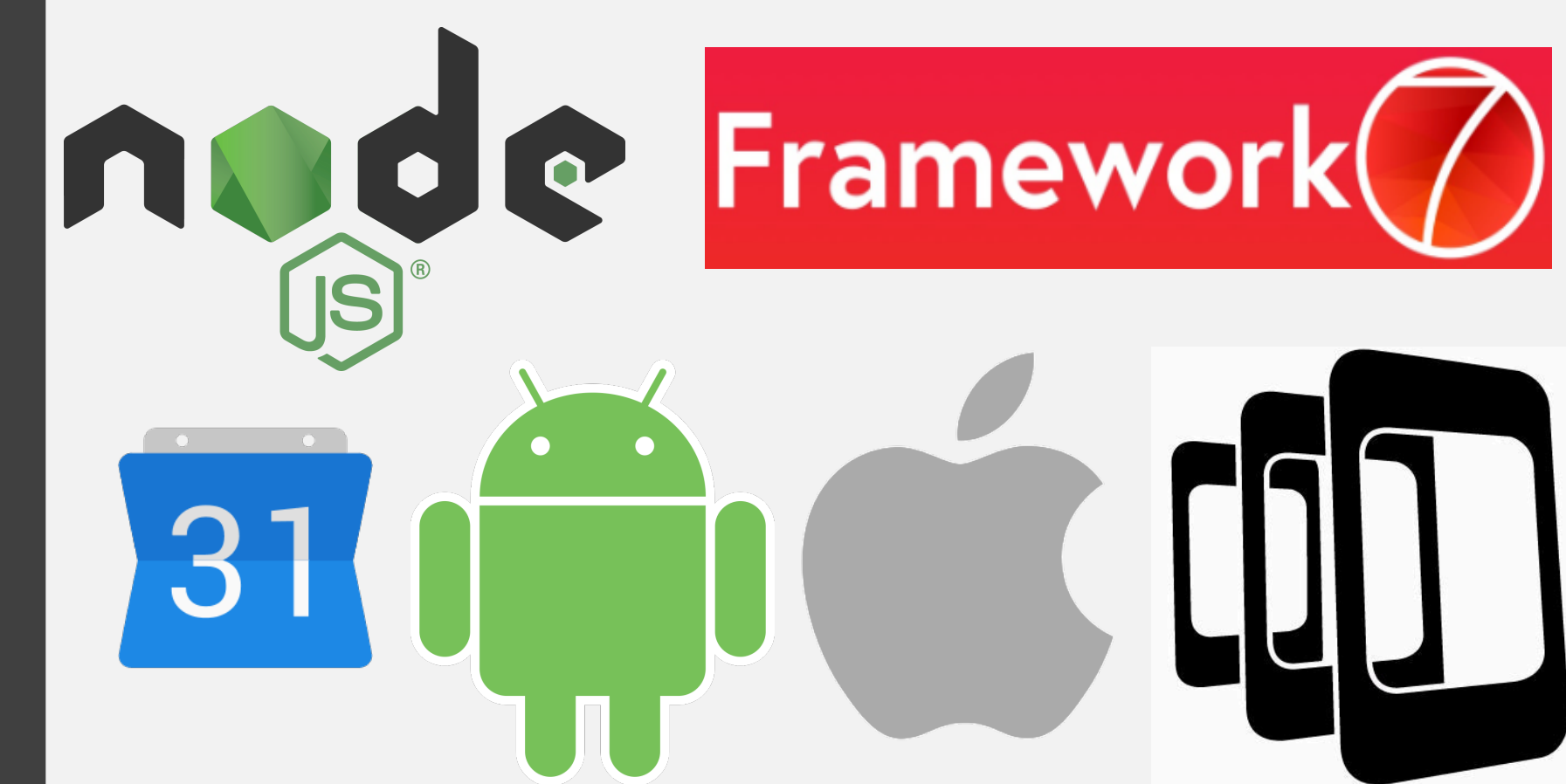
Results

- Final app functionality implements static content, an embedded *Google Calendar*, a JavaScript local-storage fitness tracker, and social media plug-ins.
- Deployment of the app uses *PhoneGap* for porting to Android and iOS devices.
- Final product to be uploaded to Android/iOS app stores.



App Logo

Technology



Future Implementation

- Administrator will have to modify code to change static content in Study tab, then push update to devices.
- Future developers have the capability to implement dynamic content through a back-end server.
- Administrator is able to keep videos and Calendar up-to-date remotely through Google services.

Acknowledgements

- Thank you to *Emily Judkins* for creating unique marching videos for the study information.
- Thank you to *Lukas Curtis* (Chippewa Valley Tech College, WI) for designing the app logo.
- And, special thank you to all the UNH cadets who volunteered to help with content creation and testing for this project!