

PROJECT: APP CLIPS

BLUEDEVIL BITES A TUTORIAL FOR APP CLIPS

**TEAM MEMBER:
HAORAN ZHANG & SHANG MA**

“Why wait user to download your App when you can launch it in a second with App Clips? A demo & comprehensive tutorial on App Clips exemplified by Duke West-Campus Restaurant Review app - BlueDevil Bites”

**CUSTOMER: RICHARD TELFORD
RIC.TELFORD@DUKE.EDU**



TABLE OF CONTENTS

Users can scan a QR code at a restaurant to submit reviews to the restaurant without having to download the entire application.



Project Contribution

A west-campus restaurant review app with App Clips enabled, plus App Clips tutorial



Demo Video

List & Search the restaurant info; Display & Upload comments; Launch the App Clips via Code; Tutorial of App Clips



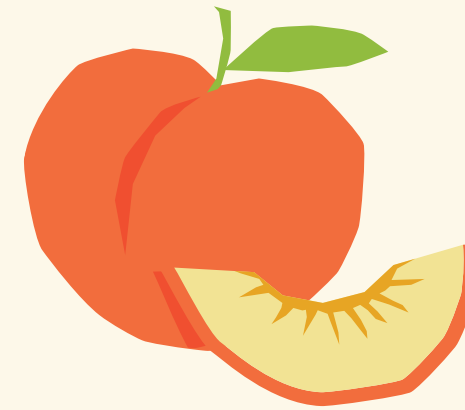
Function List

Up-to-minute info via Streamer API, Vapor Server & App Clips enabled, Tutorial on Playground



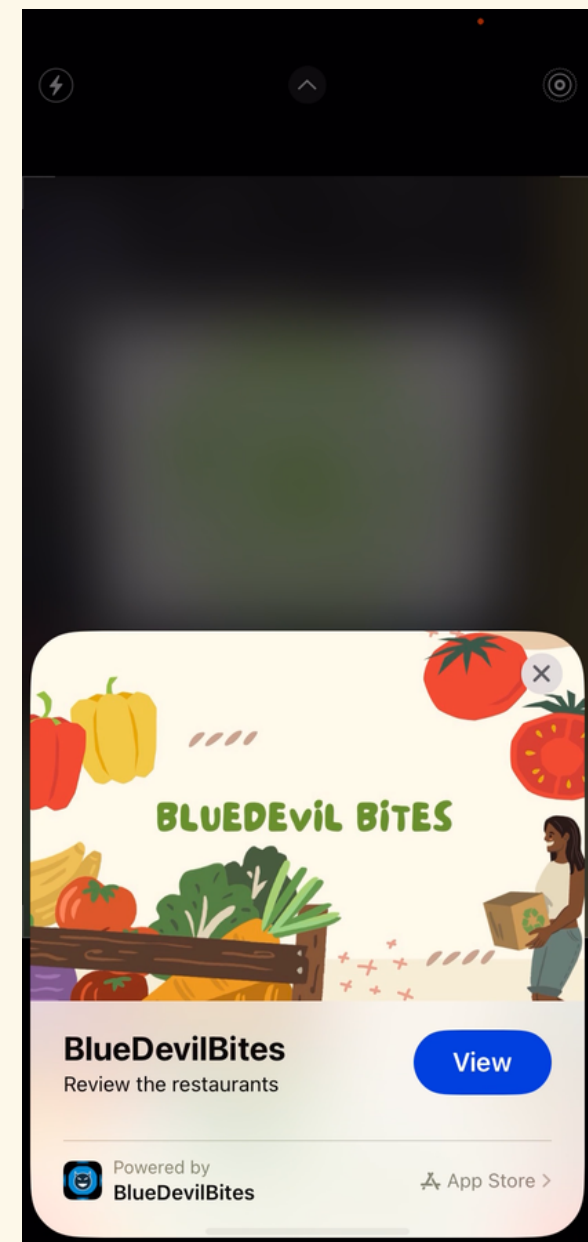
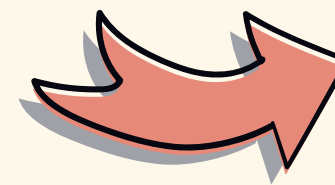
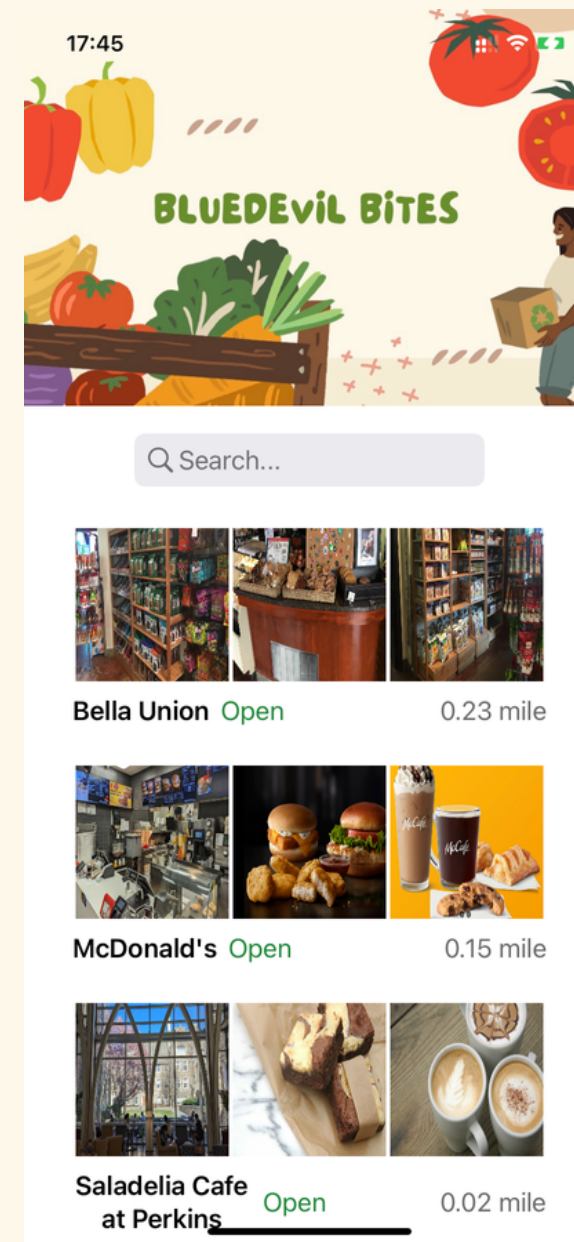
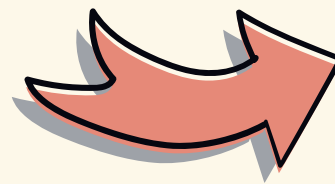
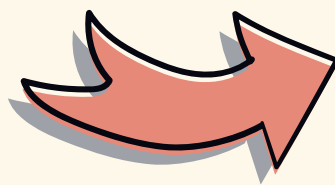
Architectural Design

How the data moves between the streamer, app sandbox (datamodel), vapor (Postsql Database) and app clips



PROJECT CONTRIBUTION

A west-campus restaurant review app with App Clips enabled, plus App Clips tutorial





FUNCTION LIST

Restaurant Info via Streamer API

The App will parse the **up-to-minute** info via the Duke Streamer API of the restaurant location, status (open or close), phone number

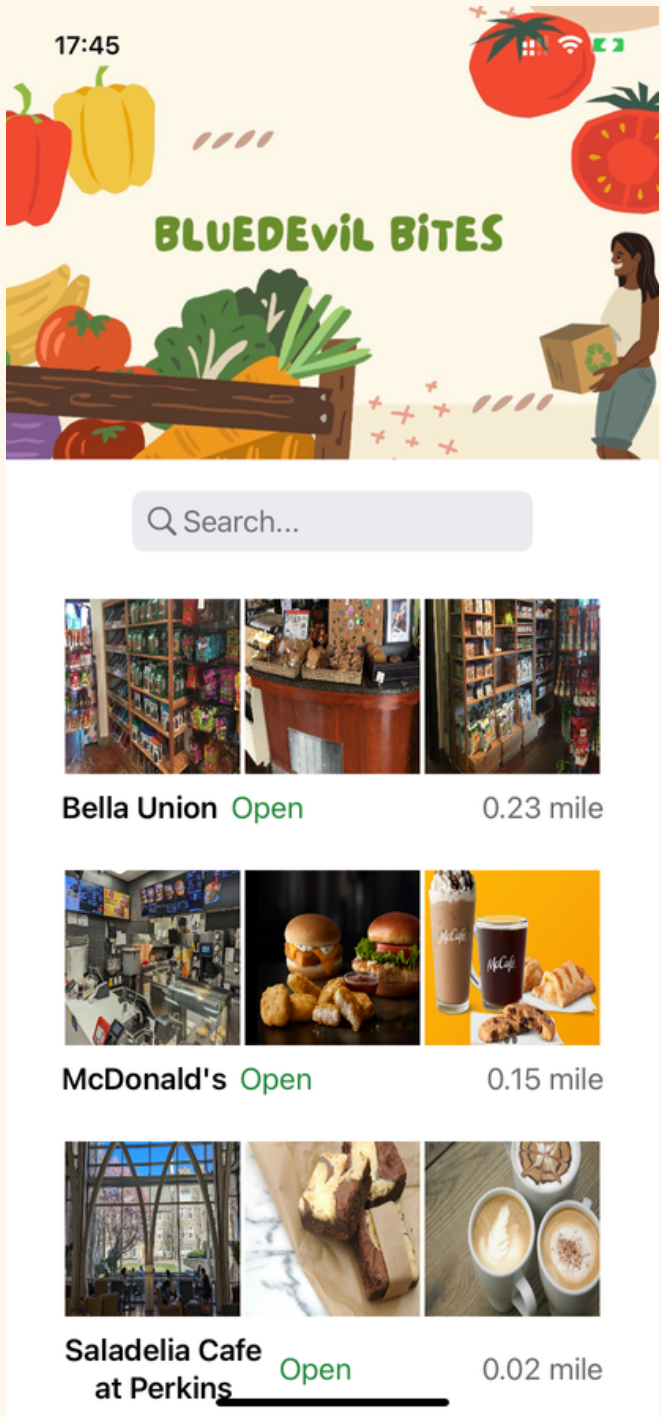
Comments managed on Vapor Server

Display & upload comments via Vapor Server, so that the app will automatically shows the **latest** comments, plus updating the **computed average rating score**

App Clips tutorial written in XCode Playground

A detailed **quick-start app clip tutorial** for any project quickly launch their app clip version with all the nuances of setting it up explained detailed with examples

DEMO VIDEO



Understanding iOS App Clips for XCode Development

This playground provides a comprehensive guide to designing and implementing App Clips using SwiftUI. It covers essential design principles and showcases examples of App Clips for various use cases.

Part 1: Introduction to App Clips

A. Definition and Overview

App Clips are a part of Apple's iOS platform that allow users to quickly access a small part of an app. They're designed to be fast and lightweight, making them ideal for performing a specific task like renting a bike, paying for parking, or ordering food.

1. What are App Clips?

App Clips are small, lightweight parts of your app that let users start and finish tasks in seconds. While they're a part of your app, they're not the full app. They are designed to provide a focused, relevant experience.

2. Brief history and evolution in iOS

App Clips were introduced in iOS 14, marking a significant evolution in the way apps interact with users. They allow for quick interactions without the need for downloading the full app, providing a seamless user experience.

B. Importance in Modern iOS Development

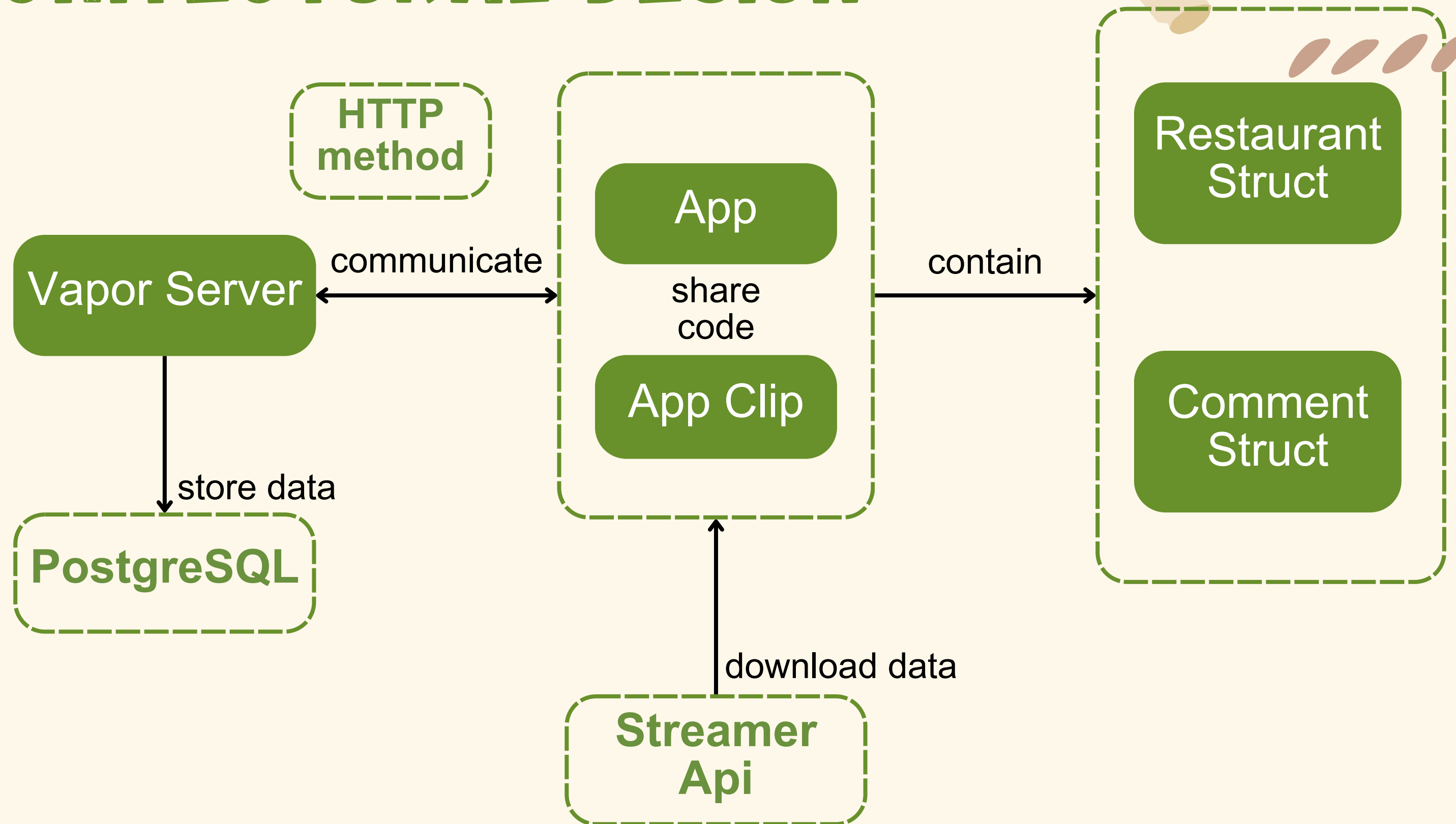
1. Advantages for users and developers

- **For Users:** Quick access to app functionalities without downloading the full app.

[App Demo video](#)

[App Clip Tutorial Demo Video](#)

ARCHITECTURAL DESIGN





INTERESTING FUN FACTS

Test the App Clips via the Local Experience

We learned about testing the App Clips utilizing the **local experience of the Developer setting**, which is very important to debug the errors.

The code for the App Clips can only be created by App Clips Code Generator

We thought any URL can be turned into the App Clips code, but it turns out that only the **App Clip Code Generator** downloaded from the Apple can do that

The App Clips share a lot of things with the main app

The development of the App Clips is not as separate with we assume, as a matter of fact, **they can utilize many things from the main app**, including views, data model and assets.



THANK YOU