

Collin Zhen:

- -App Ideas and design
- -Google Documentation
- -Virtual Box, Xcode Testing
- -Back End And Front End Development
- -Github File Uploader

Kevin Zhou:

- -App Design and layout
- -Google Documentation
- -Back End And Front End Development
- -IOS and Xcode Testing
- -Github File Uploader

Background information about our development process and difficulties (Including health issues and other frustrations):

The year 2020 has been a rollercoaster ride for many of us all, and me (Kevin Zhou) and Collin Zhen in particular, have been dealing with many frustrating health problems such as stomach problems. To further exemplify and elaborate these stomach problems, we can say we had acid reflux related problems such GERD, but to specific the name for this disease, it is called Hiatal Hernia. If we straight up tell people we have Hiatal Hernia, no one would understand. Hiatal Hernia is much more complicated to understand compared to regular acid reflux problems for many people, and including doctors as well.

So essentially acid reflux is when the stomach produces acid and stays in the stomach and waits for food to digest and when someone eats too much food at once or too much acidic or fatty foods, the acid can go up the esophagus and damage the chest and other areas. Many people eating too much food at once or too much acidic or fatty foods won't experience this issue at all, while others will suffer painfully. So, GERD is a type of acid reflux problem that affects many people and when we say GERD (Gastroesophageal reflux disease), it is a disease that affects a certain area where we eat our food before we properly digest it in the intestines, which can apply to areas just as the chest, stomach, mouth and many

more. The symptoms of these include chest pain, bitter or sour taste in mouth, sore throat, difficulty swallowing and many more.

Collin has experienced GERD problems such as sharp chest pains, sour taste in mouth and many other symptoms that lasted for weeks and had to take medication to treat it. He only had a Windows PC, so he spent a lot of trial and error on getting things running with a virtual box. He tried different mac OS versions, downloading and extracting (1-2 hr long) installing different versions of Xcode and Xcode command lines to match the OS versions. And if the database system doesn't support the version, he had to reinstall a different mac OS and hope for the best. He also had to deal with the consequence of using virtualbox as mac OS is not an official support. Everything was extremely slow for him. Such as launching any programs, searching, clicking on buttons, any task that he did involves loading and sometimes even crashes the virtual box client.

But for me Kevin, however, I have a problem that is different from what Collin has, which is Hiatal Hernia which I will explain. Telling you the process of this Hiatal Hernia will shock you and make you feel like you are in the scene with me experiencing this Hiatal Hernia disease. If you were to

search Hiatal Hernia on Google you would immediately know that is a stomach related problem which is exactly what it is.

Back in 2019 I always burped a lot (over 30 times per meal) after every meal and I never knew what the cause of that was and I thought it was perfectly normal due to gas which was what my first doctor I had since elementary told me. He didn't even bother to check what the exact cause of it was and just assumed it was just excessive gas which I had in my previous years. So I just continued to ignore it and just move on with the excessive burping and just hope the gas will go away sooner or later.

As soon as it hit March 2020, I woke up one morning very dizzy and I was about to pass out and I vomited acid and there was no food coming out and I just sat on my chair and drank water hoping it would help my stomach and after that I went back to bed for an hour. An hour later, I got up and vomited a lot of acid and I was fine after that for just one week.

One week later, after dinner I ate some chicken (was only 5 pieces) and I started to burp a lot, like over one hundred times and got really dizzy, felt like vomiting, felt cold and weak, sharp chest pain, sharp stomach pain

(thought was stomach ulcers) that would last over an hour and worst of all, had shortness of breath and I felt like I wouldn't be able to survive, and wasn't sure If I was going to call the doctor or the hospital.

The next morning, I immediately made appointment a my doctor and explained him my entire story for 30 minutes and he told me it that it "does sound like a bad GERD you have, and we don't exactly know if you have GERD for sure, and we can do lab tests such as stool test to test for any bacteria in your stomach and prescribe you pepcid right now". The results showed that I was negative for the stomach bacteria and negative for the parasite in the stool test. I felt better after finishing the pepcid and the process of that was tough since you can't really digest any food at all, like 1 small scope of food every few minutes or longer. Couldn't even finish half a small bowl in an hour -- that was how bad it was and I was hungry all the time.

3 weeks later the same problem came back, same symptoms I had back in March and this time my primarily doctor prescribed me a medication called pantoprazole which is a PPI (different from pepcid which neutralizes your acid) which significantly reduces the amount of acid your stomach makes

meaning your stomach has to work a lot harder to produce acid and you wouldn't be able to digest any food at all. This medication is alot stronger than pepcid and is mainly used for serious issues of GERD and stomach ulcers. After finishing the medication I felt better for about 10 weeks.

10 weeks later it came back, started to burp alot again and I contacted my primary doctor and he said I need to see a GI Specialist for endoscopy since he couldn't figure what the problem was other than GERD. After the endoscopy I vomited blood that day and felt really dizzy and had sore throat for many days. The results came back and I learned that I had Hiatal Hernia which is when you eat food the food goes into the stomach and the pipe connecting the esophagus to the stomach is enlarged and it can't close properly with acid splashing everywhere along with a slow digestive system, which is why I always burp alot after a meal and have gas and stomach pain.

Why did I have Hiatal Hernia and where did it come from? Doctors don't know for sure why I have hiatal hernia, some doctors assumed I was born with it, which I completely disagree with. I believe the cause of Hiatal Hernia was because I always go to bed right after a large meal hurting my

stomach and starving myself many times and poor sleeping positions as one of the main contributing factors to hiatal hernia. I never had these problems when I was younger. Doctor told me the only cure is surgery which is only for extreme cases and for me I should only just take the medication for treatment and avoid acidic and fatty foods to be safe and take more frequent meals and smaller meals throughout the day.

Nonetheless, this rollercoaster journey slowed me and Collin down from studying and doing our homework for many classes and one thing for sure I can tell you is that this was one of the worst experiences we had in our life and the worst year we ever experienced. Since we are limited on time due to our stomach problems, it is best to design a simple app that is easy to use for everyone. I hope everyone stays safe and hopes for a better future in 2021. We decided to stay home and avoid large crowds and decided to communicate with each other to design our app by messaging each other on text and contributing to our github project whenever we had time.

About our app: Introduction: Hello everyone, hope everyone is doing great! We will introduce our iPhone app that is sort of related to the to do list app, but does to a certain degree differ from it. It does undoubtedly have very similar aspects of the to do list app, but does contain some uniqueness to it. This Endless Reminder App

does offer many features to it and you can call it an "upgraded To do List App" or a "To Do List App 2.0 blended with a Planner".

What is our app?

Our iOS application is called the "Endless Reminder" or also known as the "ER" which will always be your reminder for your daily routine, tasks or schedule. The ER is known as the Endless Reminder because it will always be constantly reminding you of the things you need to do each and every day. The ER may sound confusing as some may visualize it as the "Emergency Room" but it can relate to that idea because if we always set goals for ourselves and remind us what we should do each day step by step and why we are one step closer to achieving our dreams. By doing this, we are less likely to visit the ER because we are taking care of our responsibilities and a great way to exemplify that would be to always wake up and drink a glass of water, don't skip meals like breakfast, lunch, dinner, and exercise, and always put homework/work as a priority over games and etc.

How will the App Help Us and why can it be useful?

This question is a very common or frequently asked question among many applications including mobile applications and the reason behind that is because all applications have a specific audience to target and have a common goal to achieve: make everyone's life easier or improve their quality of life. In this case, for our Endless Reminder Mobile application we can look at our own lives (Kevin and Collin's life) and look at our own situation and what goals we have in common and how we plan to achieve that. For instance, me and Collin were raised in very poor families that immigrated from China to the United States hoping for a better life, and none of our goals have been achieved to this day and we hope one day that dream will become a reality. We were raised in poor families in San Francisco and had very tight living spaces and we were always depressed. We had to undergo these experiences everyday and we wanted to make our parents, families, and friends proud by graduating college to earn a high paying salary job and buying a big house as our ultimate goal. We have been imagining that inside our heads for the past 20 years or so and watching sad movies that bring tears to our eyes as a reminder to never give up and continue to make an attempt to succeed and achieve our goals. Because we want to achieve our goals, we called it the "Endless"

Reminder" as a reminder for our dreams that will never end because that goal is always on our side regardless of what barriers we face in your journey to success.

Realm Installation:
#1
Git clone the project
#2
Save it to desktop, or any desired location
#3
CD into that saved directory. For this project, we saved in the Desktop
Directory. In Terminal we type "cd Desktop" without quotations.
#4
Once in that directory we type "cd EndlessReminder" without quotations
and go into that directory
#5
Next we type "/bin/bash -c "\$(curl -fsSL
https://raw.githubusercontent.com/Homebrew/install/HEAD/install.sh)"
without quotations and install brew
Should look like this:
kevinzhou@Kevins-MacBook-Pro ~ % /bin/bash -c "\$(curl -fsSL
https://raw.githubusercontent.com/Homebrew/install/HEAD/install.sh)"

Type "brew install cocoapods" without quotations

#6

```
#7
Should let you know its successfully installed
#8
Type "pod init" without quotations
#9
Type "open Podfile" without quotations if there isn't Podfile and edit it
to look like this:
#(Below this line)
# Uncomment the next line to define a global platform for your project
# platform :ios, '12.0'
target 'EndlessReminder' do
 # Comment the next line if you don't want to use dynamic
frameworks
 use frameworks!
 # Pods for EndlessReminder
```

pod 'RealmSwift', '=10.1.4'

```
target 'EndlessReminderTests' do
  inherit! :search_paths
  # Pods for testing
 end
 target 'EndlessReminderUITests' do
  # Pods for testing
 end
end
#(Above this line)
Without quotations, and it should already be included in the file without
editing it like this.
#10
Type "pod install"
#11
Should successfully install realm
```

Now you can begin the testing for ios app

kevinzhou@Kevins-MacBook-Pro EndlessReminder % open EndlessReminder.xcworkspace

#13

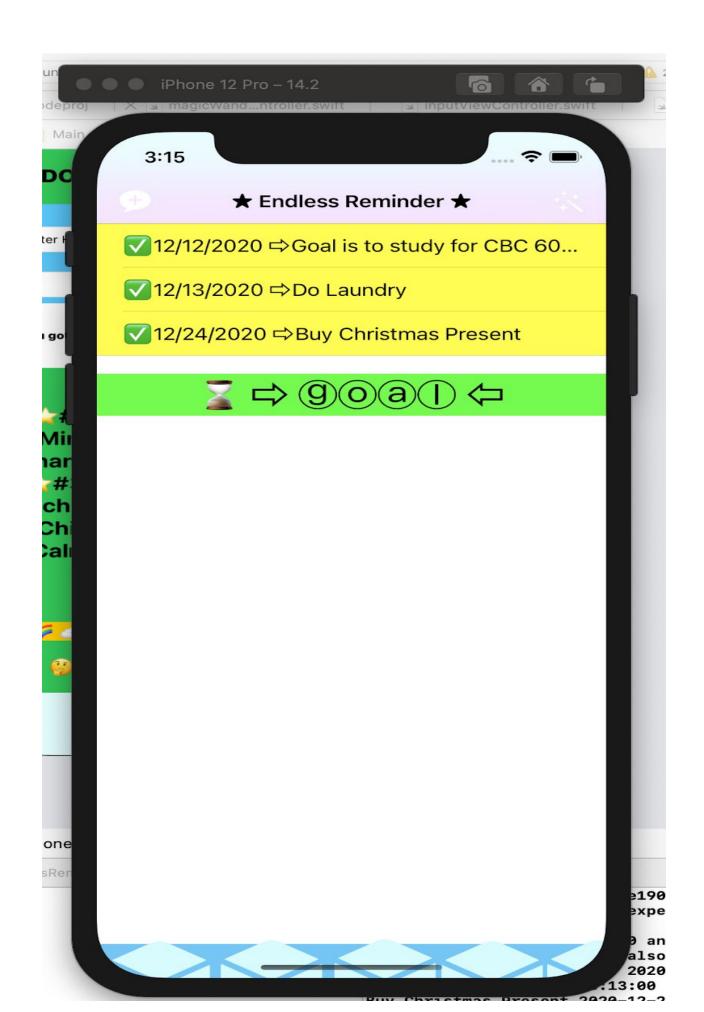
Module not found error?

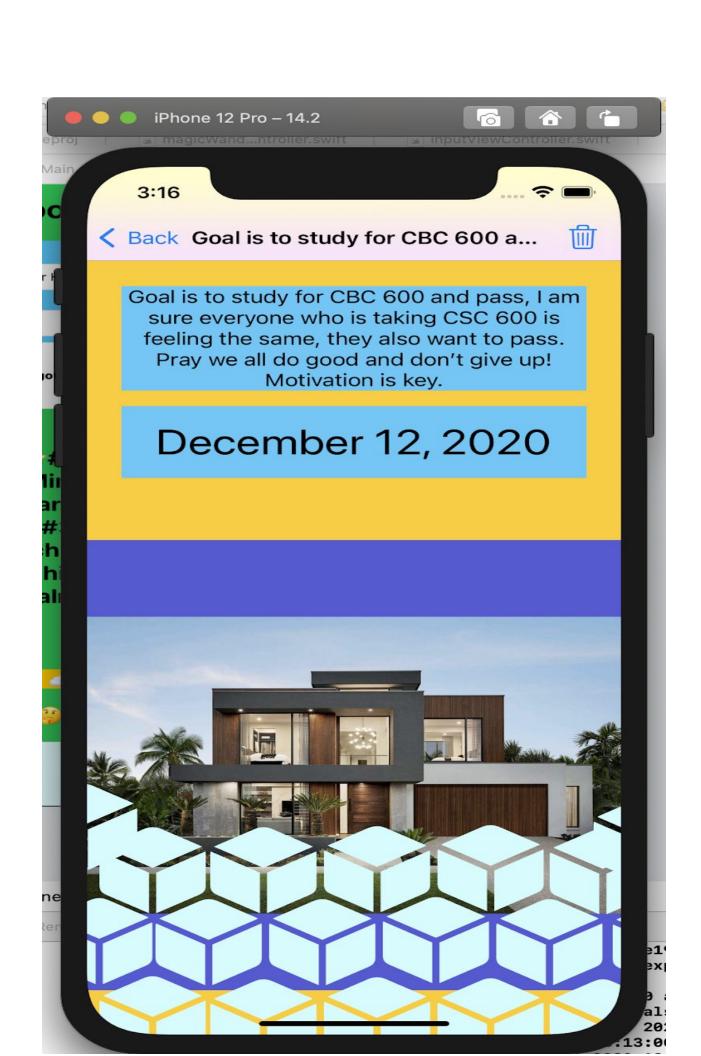
Once doing opening the file, you may encounter an issue like "RealmSwift Module not found" and that could be due to many issues such as not correctly installing brew, pod or realm.

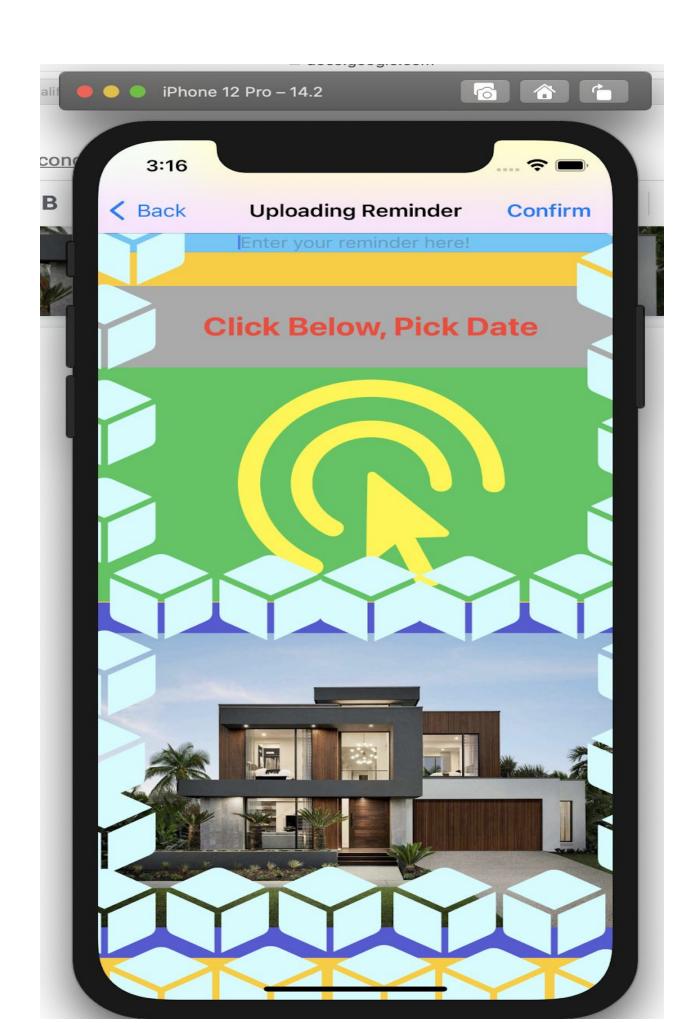
If RealmSwift was correctly installed as shown in the terminal with messages indicating that it was successfully installed, then make an attempt to build that IOS app and then finish building it, which can take seconds to minutes depending on your computer. To build it, simply click the "Play Button" which is essentially running the app, which does build the app first, then runs it for a test.

#14 Should be able to run the app successfully

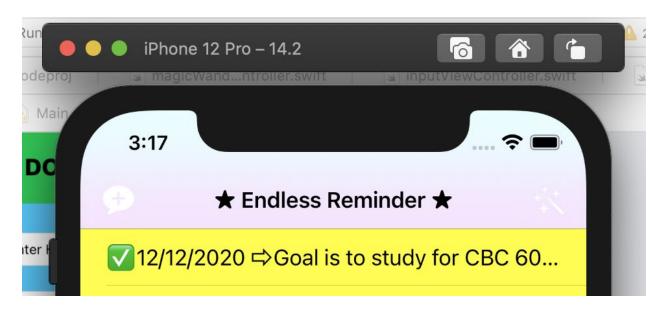
Sample run:



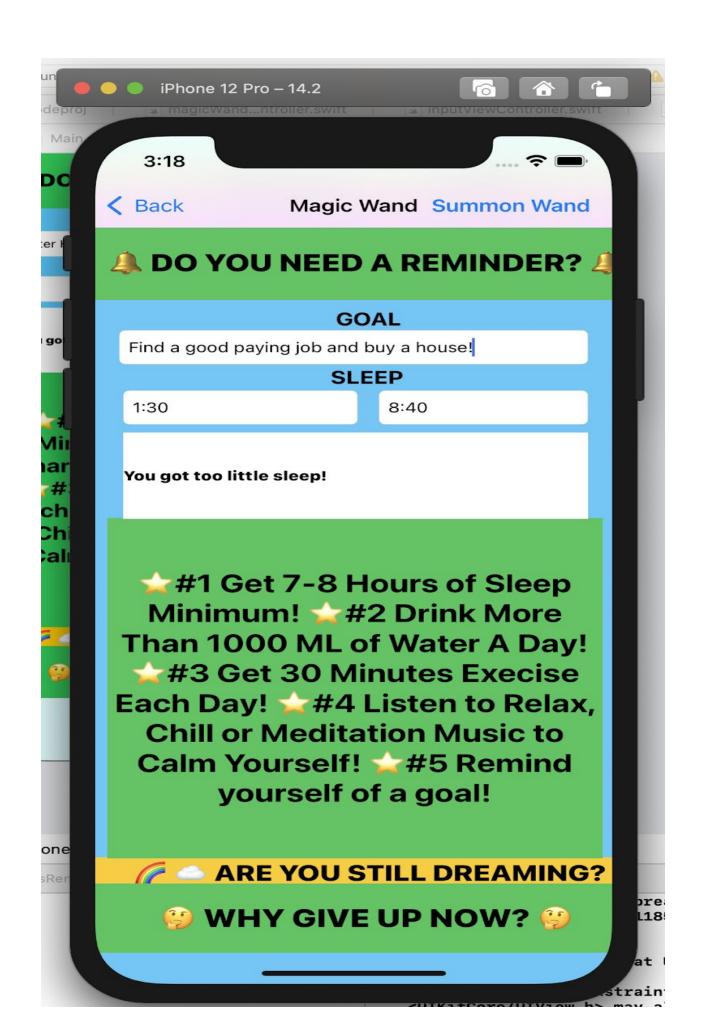




If you click the magic wand!



Click on the right corner, then enter info and click summon wand:



Tell you how many sleep you get in minutes:

