Tell us about the features and technologies you used in your Swift playground.

Overview: I have developed an app that holds two-fold functionality. It acts as a learning tool while playing a memory card matching game. The motivation behind its development is to disseminate preventive measures to fight against COVID-19. Thus, I started with a simple yet most effective game to outspread general public health information. The technology used in the app is **UIKit** to incorporate multiple features such as ImageView, Label, Viewcontroller, etc. Features including **PlaygroundSupport** is used to get **LiveView**, while **Gameplaykit** is used to shuffle the cards. Most importantly, the **AVFoundation** feature is used to play sounds to catch the player's attention.

Functionality: The app starts with its title on the main screen "COVID-19 LEARNER". The player first sees the *Rule* to play the game with *Play to Learn* button to initiate the game. The second screen of the app displays the cards being randomly spread and a one-second peek for the player to get a little sneak peek. Now, when a player starts flipping the cards, the app keeps a count on their number of flips. If this number goes higher than a certain limit, the app changes color signifying the deteriorating performance of the player. The way a player fetches prevention tips against COVID-19 is by flipping the same visual cards. The app is made to give a glance at each tip through *Visual* and *Textual* information. Visual information is shared by the faces of the cards, each card has a face which shows a tip to prevent the spread of the virus . The textual information is shared by an alert that a user gets every time he/she gets a pair of card right. As one progresses towards the end of the game, each tip is shown as an alert. The main reason to choose an alert is to entice user attention. There are many more functionalities of the game like *Reset the game, Play again if the user gets a low score*, etc.

We have to fight against the COVID-19 pandemic by ourselves at the end of the day. So, this is my little contribution, to leave an impact and reduce the spread of this disease. Thank you!

If you've shared or considered sharing your coding knowledge and enthusiasm for computer science with others, let us know.

I am a quick learner, but learning is always outweighed by teaching. I believe in sharing what I have learned as much as I can and in any way I can. Thus, during my university years of learning, I have founded a club viz., HackClubMAIT with the help of HackClub, Microsoft & Github. Under which, I disseminated my knowledge through tutorials and lectures on Git and GitHub. I took a prominent session on *How to Make a Portfolio* to the audience of 50+ student leaners. Also, I'm a Mozilla club captain, which allows me to recurrently teach fundamental concepts of data structures to freshmen and sophomores. Additionally, I write technical blogs, one of them is *Microsoft's first own chatbox.* Others can be found on my account @manthankeim on Medium.

Currently, I am mentoring under the Mifos Initiative for Web-App for this season of Google Summer of Code which is another wonderful opportunity to be guiding a bunch of developers who think beyond the possibilities.

Is there anything else you would like us to know?

I always try to expand my technical horizons. This app is one such effort in that direction. Thank you very much for reviewing my app. You can view my portfolio at https://manthankeim.tech. Also, I'm an avid Open source contributor, and as a part of it, I have developed multitude of projects using open-source technologies.

I recently developed a "Bull's Eye" interactive game using Swift, made for iOS users. My "Social Searcher (SIH Project)" is a web application developed using Ruby on Rails. Another project, "Reddit Flair Detector" is a web application using Machine Learning and Web Scraping. These projects including others can be found on my profile, GitHub @manthankeim. My recent contributions include contributing to OpenCV release version 4.1.1.

Did you use open source in your project?

The entire project is made using Swift, along with open-source imported libraries and packages. Therefore, yes this is completely an open-source-based app. At the same time, I hunted and used some references from other great projects on GitHub for the app's better functionality. The motivation behind using Swift's open-source feature was to help the app in its scaling, reduced maintenance, and simple licensing management. I'm thankful to the Apple Developer's team for this incredible challenge, I hope my contribution will make a dent in this world.