Si Venkateswara College of Engineering



SRI VENKATESWARA COLLEGE OF ENGINEERING

DEPARTMENT OF ELECTRONICS AND COMMUNICATIONS

workshop on

FLUTTER APP DEVELOPMENT

FROM 18/02/2023, SATURDAY (CONNECT WITH US EVERY WEEK-END)

10:00a.m onwards

Topics to be covered:

- Installation of Flutter and Android Studio and running the sample program Workshop
- Widgets
- Fonts, Colors, Styling UI
- List view and Grid View
- Page Navigations
- REST API integration
- Firebase Part-1
- Firebase Part-2

E-certificates will be provided to all the participants!! OPEN TO ALL YEARS

Registration link: <u>https://forms.gle/PpyR5LpAfLCXfSDP9</u>

For queries contact:

Kishore M, Final year ECE (*Mentor*): **+91 6379 659 221**

FACULTY CO-ORDINATORS: Dr.D.Menaka,Ms.K.Srividhya,Ms.S.Kalyan Ms.L.Anju,Mr.M.K.Varadarajan

					WhatsApp Group Link:	
Fimestamp	Name:	Year:	College mail ID:	Phone number:	https://chat.whatsapp.com/HhkbrPuKMczBcocwpf1L4N	
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2/16/2023 11:46:27	Keerthana D	III rd	2020ec0173@svce.ac.in	7358160826	
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2/16/2023 17:36:23	Srivani M	III rd	2020ec0039@svce.ac.in	7448810203	
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2/16/2023 18:45:15	DHAANYAAKUMAAR G	III rd	2020ee0445@svce.ac.in	9345526546	
2/16/2023 19:03:51	DINESH ADHITHYA S B	III rd	2020ec0524@svce.ac.in	8072810263	
2/16/2023 19:09:50	S PRIYADHARSHINI	ll nd	2021ec0181@svce.ac.in	7871010122	
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First name	Last name	Email	Duration	Time joined	Time exited
SUDARSHAN	С	2020ec0235@svce.ac.in	1 hr 1 min	10:34 AM	11:35 AM
Aravind V	CS	2020cs0192@svce.ac.in	9 min	10:55 AM	11:05 AM
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NITHISH P	EC	2020ec0051@svce.ac.in	1 hr 4 min	10:31 AM	11:35 AM
Srivarshni S	EC	2020ec0661@svce.ac.in	58 min	10:37 AM	11:35 AM
SUBBIAH SUNDRAM Y	EC	2020ec0081@svce.ac.in	46 min	10:52 AM	11:38 AM
AJAYKUMAR A J	ECE	2021ec0127@svce.ac.in	55 min	10:40 AM	11:35 AM
AKSHAYA NETHRA N	ECE	2021ec0002@svce.ac.in	1 hr 1 min	10:35 AM	11:36 AM
AMARNATH S	ECE	2021ec0202@svce.ac.in	43 min	10:55 AM	11:38 AM
Anju	ECE	anju@svce.ac.in	20 min	10:24 AM	10:44 AM
KARUPPASAMY R	ECE	2021ec0367@svce.ac.in	43 min	10:37 AM	11:20 AM
MADHAV B	ECE	2021ec0473@svce.ac.in	48 min	10:45 AM	11:33 AM
MAGESH S	ECE	2021ec0642@svce.ac.in	1 hr 7 min	10:29 AM	11:35 AM
MANIKANDAN R M	ECE	2021ec0669@svce.ac.in	1 hr 1 min	10:34 AM	11:35 AM
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NELLAI NAYAGAM V	ECE	2021ec0901@svce.ac.in	28 min	11:09 AM	11:38 AM
RAAJ KUMAR S	ECE	2021ec0216@svce.ac.in	58 min	10:37 AM	11:35 AM
RAHUL K	ECE	2021ec0639@svce.ac.in	57 min	10:36 AM	11:35 AM
RAJESHWARAN R	ECE	2021ec0326@svce.ac.in	45 min	10:39 AM	11:35 AM
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SRI SANDHIYA R	ECE	2021ec0057@svce.ac.in	55 min	10:35 AM	11:35 AM
SRI VIDHYA K	ECE	srivi@svce.ac.in	1 hr 16 min	10:22 AM	11:38 AM
VARADARAJAN MK	ECE	rajan@svce.ac.in	5 min	10:43 AM	10:49 AM
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DHAANYAAKUMAAR G S	EE	2020ee0445@svce.ac.in	11 min	10:47 AM	10:58 AM
087 SRIRAM V	IT	2020it0097@svce.ac.in	49 min	10:46 AM	11:35 AM
088 SUNDARAM S	IT	2020it0617@svce.ac.in	15 min	11:20 AM	11:35 AM
HARIHARAN S	MR	2020mr0422@svce.ac.in	32 min	10:49 AM	11:21 AM
RAKSHANA	S	2020ec0712@svce.ac.in	1 hr 3 min	10:34 AM	11:36 AM



DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

Workshop on FLUTTER APP DEVELOPMENT(18/02/2023-18/03/2023)

The Department of Electronics and Communication conducted a workshop on Flutter app development from February 18th, 2023, to March 18th, 2023. The main objective of the workshop was to introduce participants to the basics of Flutter, including the integration of APIs and Firebase. The workshop was conducted by Mr. M. Kishore was attended by over 30 participants from various departments of SVCE.

TOPICS COVERED IN WORKSHOP:

- 1. Installation of flutter and Android Studio and running the sample program.
- 2. Widgets
- 3. Fonts, Colors, Styling UI
- 4. List View and Grid view
- 5. Page Navigations
- 6. REST API integration
- 7. Firebase



ABOUT THE MENTOR:

Kishore is a final year student currently pursuing ECE at Sri Venkateswara College of Engineering. He is a skilled Flutter and MERN stack developer with experience in building successful applications. Kishore has also won several hackathons, including the UNESCO India Africa Hackathon in 2022 and Smart India Hackathon in 2022.

DAY 1:

On the first day of the workshop, participants were guided through the installation process of Flutter and Android Studio on their computers. They were also taught how to set up the Flutter and Dart plugins in Android Studio.

Once the installation process was complete, participants were introduced to the basics of Flutter app development. They learned how to create and run Flutter projects in Android Studio and were shown how to use the emulator to test their applications. The instructor also demonstrated how to run the Flutter app on a mobile device.

By the end of the day, participants were able to install Flutter and Android Studio on their computers, set up the necessary plugins, and run a basic Flutter app on an emulator or mobile device. The session provided participants with a solid foundation to begin their journey in Flutter app development.

DAY 2:

On the second day of the workshop, participants delved deeper into the basics of Flutter and Dart programming. The session focused on object-oriented programming concepts in Dart, such as classes, objects.

After a theoretical introduction to object-oriented programming in Dart, participants were given a practical assignment. They were asked to create a replica of a given user interface (UI) design using Flutter widgets and Dart programming. This assignment aimed to test the participants' understanding of the Flutter and Dart concepts taught in the previous sessions, as well as their ability to apply them in a real-world scenario.

The participants were given ample time to work on their assignments and were encouraged to ask questions and seek help from the instructor as needed. The instructor also provided feedback and suggestions to help the participants improve their code.

DAY 3:

On the third day of the workshop, participants learned about the Pub.dev package repository and how to use it to install different plugins in their Flutter apps. The session specifically focused on using Pub.dev to install Google Fonts, which is a popular package for adding custom fonts to Flutter apps.

Participants were also taught how to add images to their Flutter apps using the AssetImage widget and the NetworkImage widget. The instructor demonstrated how to load images from the internet and from local storage.

In addition, participants learned how to implement navigation between screens in a Flutter app using the Navigator widget. They were shown how to navigate to a new page when a button is pressed and how to pass data between screens.

DAY 4:

On the fourth day of the workshop, participants were introduced to the concept of API integration in Flutter app development. The session began with a theoretical overview of APIs, followed by a demonstration of how to integrate APIs in a Flutter app.

The instructor explained his own REST API GitHub repository and showed participants how to use it to fetch data for their Flutter app.

After this, participants were introduced to the News API, which is a popular API for fetching news articles from various sources. They learned how to sign up for a News API account and how to use the API to fetch news articles for their app.

DAY 5:

On the fifth day of the workshop, participants were introduced to Firebase, which is a popular platform for mobile and web app development. The session began with a theoretical overview of Firebase, followed by a demonstration of how to create a Firebase account and a project.

The instructor demonstrated his own project which he built using Firebase and showed participants how to integrate Firebase into their Flutter app. The session specifically focused on Firebase Authentication, which is a popular feature of Firebase for authenticating users in mobile and web apps.

Participants were given hands-on experience in setting up Firebase Authentication in their Flutter app. They were shown how to use the Google sign-in method in Firebase to authenticate users with their Google account.

After this, participants learned how to set up Firebase in their Flutter app using the Firebase Console. They were shown how to add Firebase to their project, configure their app to use Firebase, and how to use the Firebase Realtime Database to store and retrieve data.

DAY 6:

On the sixth and final day of the workshop, the instructor began the session by summarizing the topics covered during the previous days of the workshop. He also discussed the importance of using Flutter and Firebase in building modern mobile applications.

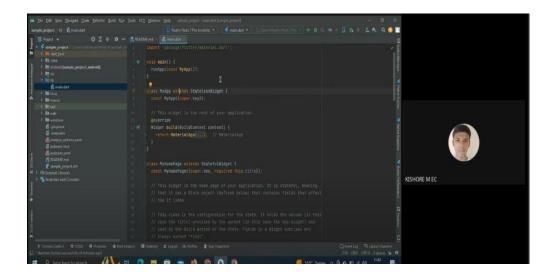
The instructor then shared ideas with participants on how they can use Flutter to create innovative mobile apps with various features that can be showcased in hackathons or other competitions.

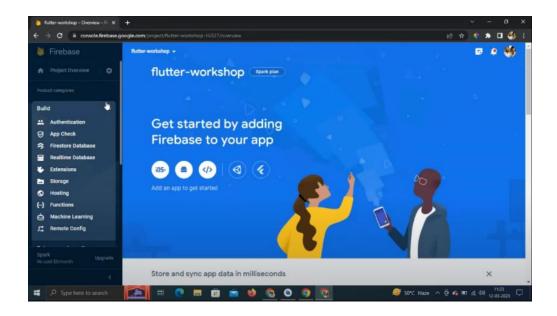
The session concluded with a presentation of the instructor's own hackathon project, where he demonstrated how he used Flutter and Firebase to create a mobile app that addressed a real-world problem.

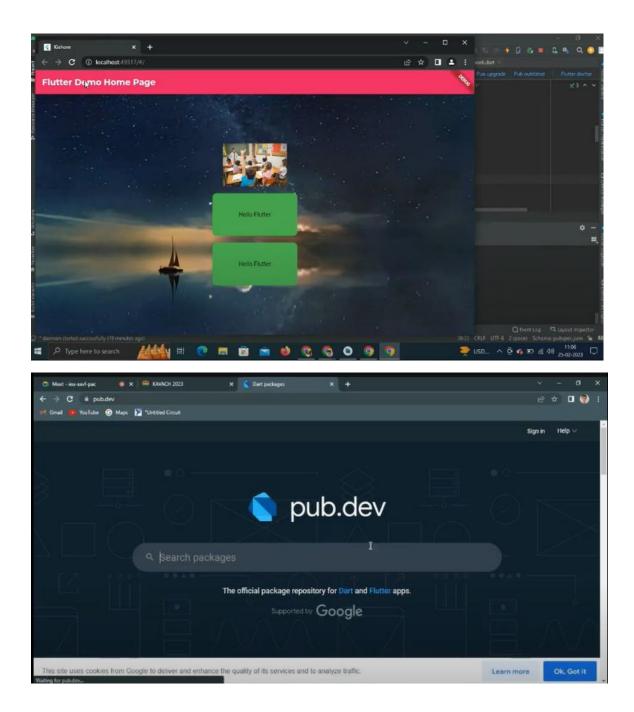
Finally, participants were given the opportunity to ask any doubts or questions they had about Flutter, Dart, Firebase, or any other topics covered during the workshop. The instructor addressed all the queries and cleared any doubts participants had.

By the end of the workshop, participants had gained a better understanding of Flutter, Dart, API integration, Firebase, and how to use them to build modern mobile applications.

SCREENSHOTS:







CONCLUSION:

Overall, the workshop was an excellent opportunity for participants to learn about Flutter and its applications in mobile app development. The skills and knowledge gained during the workshop will be valuable for participants in their future endeavors, whether it be in hackathons, competitions, or their professional careers.

FACULTY CO-ORDINATORS:

- 0 Dr.D.Menaka
- 0 Ms.K.Sri Vidhya
- 0 Ms.S.Kalyani
- 0 Ms.L.Anju
- 0 Mr.M.K.Varadarajan

D. Me

Signature of the Coordinator

authorby

SIGNATURE OF HOD, EC