

GUJARAT TECHNOLOGICAL UNIVERSITY

SUBJECT NAME: Symbian OS Communications Programming

SUBJECT CODE: 3715305

Semester I

Type of course:

Prerequisite:

1. Java Programming

Rationale:

Teaching and Examination Scheme:

Teaching Scheme			Credits C	Examination Marks				Total Marks
L	T	P		Theory Marks		Practical Marks		
				ESE(E)	PA (M)	ESE	PA(I)	
3	2	0	4	70	30	30	20	150

L- Lectures; T- Tutorial/Teacher Guided Student Activity; P- Practical; C- Credit; ESE- End Semester Examination; PA- Progressive Assessment;

Content:

Sr. No.	Content	Total Hrs	% Weightage
1	Symbian OS Overview, Interaction Design for Symbian OS	6	10
2	Symbian OS Essentials, Introduction of MIDP Programming on Symbian OS	6	10
3	Java Symbian OS ,Symbian OS Communications Programming, Multimedia Programming , Architectural View of Symbian OS	6	10
4	Symbian OS Client/server Programming, Implementing Device Drivers for Symbian OS,	7	20
5	Memory management on Symbian OS Implementing Symbian OS Communications Modules	7	20

Text Book:

1. Developing software for Symbian OS by Steve Babin/Wiley
2. Symbian OS Communications Programming by Michael J. Jipping/Wiley
3. Symbian OS Platform Security by Craig Heath/ Wiley
4. Symbian OS Internals by Jane Sales/Wiley

Course Outcome:

On completion of this Subject, students will have an understanding of

1. The Symbian OS communications architecture is the cornerstone of Symbian OS - enabling the combination of voice communications, wireless Internet access and computing functionality.

2. This subject is designed to help developers understand the Symbian platform and learn how to develop and deliver those vital products that plug-in to the comms architecture. Services built around this architecture will drive the 3G market.
3. The knowledge and application skills to design and implement a Symbian OS application.

List of Experiments: (with Open Ended Problems)

- 1) Create a meal ordering system online which allows users to enter the required meal which is a radio button. Where the meals are regular, special, parcel. And whatever is the meal ordered should be vegetarian or non-veg and then write a bill for it and print it on the screen
- 2) Create a movie ticket booking system for the mobile phones. This should allow the users to select the area, then select the theater in that area and then when the theater is selected several movies are shown with pictures and when the user selects on one movie a ticket will be booked it should ask for name and email and the ticket should be mailed to that mail id.
- 3) Create a PC sales on mobile where user is asked to select one of the models and when he selects the model he is shown several PCs in that range of PC and then when he finally selects the PC of his choice an invoice should be printed with all the details of the selected phone.
- 4) Design a simple cloth store for mobile where users may be able to buy the accessories, provide a sample showroom on mobile which lots of choices to the users about the various things that they can buy in the store and then when he finally finishes his shopping display the items he bought and the bill for it in a new screen.
- 5) Create a bicycle showroom on mobile which allows users to shop for various bikes and when the user selects a bike it is displayed and user can have different views of the bike like the front view of bike the back view and then if he selects the bike as final he should be able to buy it and show him the bill.
- 6) Provide a customer support system for the user and when the user selects his problem he is asked to explain it one screen finally when he finishes entering the problem he will be taken to a new screen which allows the users to submit their question and display a thank you screen with a small note on when the solution will be issued to the user.
- 7) Create a mobile sendsms screen of your own which allows the users to send sms to a group of users from one place. It allows the users to select the users and when the user makes the selection the user is sent a greeting of your choice.
- 8) On three screens all the details that are required to print the visiting card for user are taken in. When all the details are taken in finally show the user a screen which displays the visiting card. The card should be in perfect format neatly fitting the screen.
- 9) Create a registration form for users on mobile for college. After all the fields are entered validate for correct entries. Finally when everything is correctly entered display the final output to the user to submit to the college management. Send a SMS to the user that his request has been received and that he will be called for interview very soon.
- 10) Create a simple messenger which allows you to chat using the SMS. This application should allow the users to display all the previous messages sent to the user and then allow them to send further messages.

Major Equipment's:

Nokia S60 Mobile Handset

List of Open Source Software/learning website:

NetBeans IDE

JDK