



Daffodil International University
Department of Computer Science and Engineering
Faculty of Science and Information Technology
Mid-Term Examination, Semester: Spring 2019
Course Code: CSE 334 Course Title: Wireless Programming
Section All Course Teacher: All

Time: 1:30 Hours

Total Marks: 25

[The figure in square brace at the right side of a question indicates the marks allocated to the questions. The symbols and notations used carry their usual meanings.]

Mr. Sakib is planning to develop a blood donation android application for his company. The application requires a user to register to the system by providing a valid username and password. The existing users will be able login to the system by using their username and password.

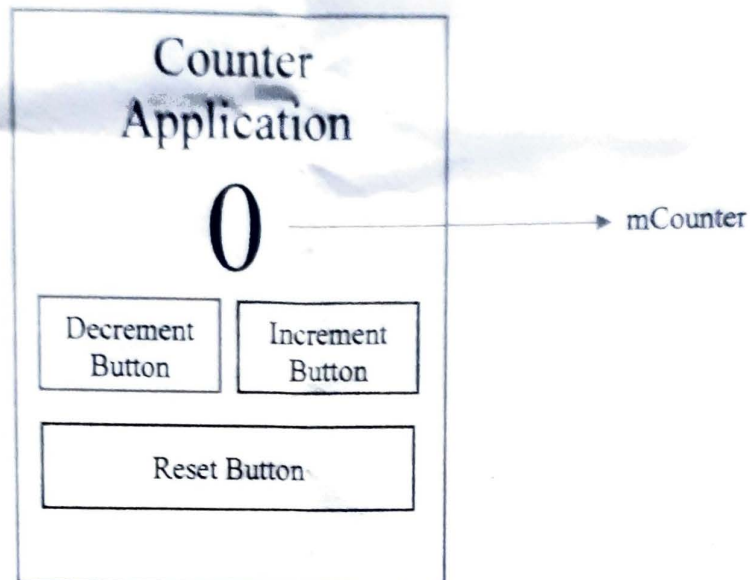
If the credentials are provided correctly, the user will be redirected to a new screen where they will be able to see the donor list containing the contact information of the donor coming from a remote server. Failing to provide a correct username or password, will display a small pop up message showing, **"Incorrect username or password"**.

1. Now answer the following questions based on the given passage: 5 X 2= 10

- a. Where do we declare permissions in an android app? Do we have to explicitly declare any permission(s) for our app? If so, what it would be?
- b. How would you display the pop up message when incorrect credentials are provided? Explain with proper example. Write code snippet if necessary.
- c. How would we move from one activity to another in android? Is it possible pass data while changing the activity? Explain with proper code.
- d. Provide a GUI for the login screen. The login screen will contain two input fields for username and password respectively, a login button, an option to remember the password and a registration button for the new users.
- e. What component of Android allows us to supply data from one application to another on request? Which Java class is responsible for handling such requests?

2. What are the purpose of using Service and Broadcast Receiver in Android? What are the two steps to make a Broadcast Receiver work? 4

3. What is event handling? What are the concepts related to Event handling management? 3



4. a. Write down the xml code to implement the given design. Assign unique ID's to each of the Views. 3

b. Write down the Java code to implement the proper logic. [The **increment** and **decrement** buttons will increment and decrement the values of mCounter respectively. The **reset** button will set the mCounter to 0.] 5



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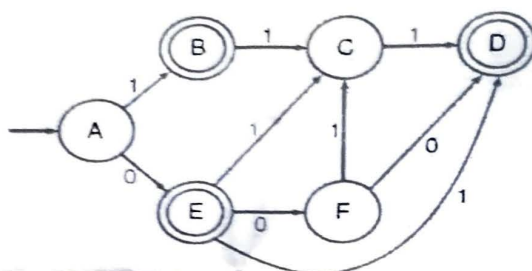
Course Code: CSE331 Course Title: Compiler Design Time: 90 minutes
 Course Teacher: All Section: All Campus: All Total Marks: 25

Life will give you many options, but today you have to "Answer all the questions"

1. a) Explain the tasks of a Symbol table and Error Handler. 3
 b) Show all the phases of compiler for the following statement. 5

$w = a + (b * c) / d - e * f + 2$

2. a) Consider the following figure and answer the following questions. 2-5
 (i) Write down the 5 tuples of Non-deterministic finite automata.
 (ii) Which type of automata is? If there is non-determinism, then convert the automata into deterministic finite automata.



- b) Construct the NFA for the following regular expression 3
 (i) $P(P|Q)^*|Q^+$
 (ii) $PQ^+|ABC^+$
3. a) Consider the following CFG and answer the following questions. 5

$S \rightarrow 0F \mid 1E$

$E \rightarrow 0 \mid 0S \mid 1EE$

$F \rightarrow 1 \mid 1S \mid 0FF$

- (i) Show the LMD and RMD for the string "1000110110".
 (ii) Find out if the CFG is ambiguous or not.
- b) Write down the regular expressions for the following languages. 2
 Consider $\Sigma = \{L, D\}$

- (i) A password started with letters and special character, and then consecutive any three digits followed by at least one letters.
 (ii) A password beginning with an uppercase letter, then an underscore and five random digits ends with zero or more instance of any letters.



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Mid-Term Examination, Semester: Spring 2019

Course Code: CSE 333

Course Title: Software Engineering

Section: ALL

Course Teacher: ALL

Time: 1:30 Hours

Total Marks: 25

[Answer all the Question]

Part - A

1x5=5

1. During software development which factor is most crucial?
a. People b. Process c. Product d. Project
2. What is full form of SDLC?
a. System Design Life cycle c. System Development Life Cycle
b. Software Design Life Cycle d. Software Development Life Cycle
3. Which of the following are not type of SDLC models?
a. Waterfall Model c. Big Bang Model
b. Agile Model d. Capability & Maturity Model
4. Identify the correct statement: "Software engineers shall
a. act in a manner that is in the best interests of his expertise and favour." c. ensure that their products only meet the SRS."
b. act consistently with the public interest." d. all of the mentioned.
5. The reason for software bugs and failures is due to
a. Software companies c. Both Software companies and Developers
b. Software Developers d. None of the above

Part - B

4. Mr. AHR is fed up by doing lots of official work. Now recently the pressure is unbearable. So he decided to open up his own business of online food cuisine (cuisine is food cooked in a certain area) and leave his old job. Now he decided to name his business according to his most favorite words "Ki Khaben Bolen". Main theme of this business is to provide homemade food to the office employees. So there will be three types of user namely Customer (Those who will enjoy the food e.g. Employees, students etc.), Chef (Those who will cook foods) and Admin. A customer can search for food, create his profile, order food and provide ratings to a food. Except for searching food a customer needs to be logged in for the other activities. A Chef can create profile and Food menu. But for both login is needed. Admin can add or remove a chef and Food menu but needs login. Admin can also update the information of a Food menu after login.

To create a food menu a chef has to enter a name for the cuisine. Fix a price for the cuisine. Then the chef has to select the type of the food e.g. Lunch, snacks or Dinner. After that a picture of the food followed by the details of the food ingredients. To place order a customer has to choose the type of food (Lunch, Dinner) he or she wants to enjoy. Then click on a menu. After that enter quantity that is how many he/ she wants and the area where food will be delivered to. Then Click "confirm button".

(Make all the necessary assumptions you want if needed)

- a. Construct a Use Case Model for the above scenario. 6
- b. Describe "Order Food" and "Create Food menu" Process. 5
- c. Design a GUI for "Order Food" and "Create Food menu" Process. 5
- d. What kind of SDLC you would like to use for the above scenario. Explain. 4

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Midterm Examination, Semester: Spring- 2019

Course Code: ACT-301 Course Title: Financial and Managerial Accounting

Level & Term: L3T3 Section: All

Course Teacher (with Initial) All

Time: 1 hour 30 minutes

Part - A

(Answer any 2 questions)

1. What is accounting? Briefly explain about Accounting Equation. (2)
2. What do you mean by depreciation? Why do we charge depreciation? (2)
3. Write down about different Accounting Assumptions. (2)
4. Write short note: Revenue recognition principle, Matching principle. (2)

Part - B

(Answer all questions) [7*3=21]

1. Nahid started his own consulting firm, Nahid Consulting, on April 1, 2007. On April 30 the balance sheet showed cash Tk. 28000, accounts receivable Tk. 25000, accounts payable Tk. 19000 and capital Tk.34000 .The following transactions occurred during the month of May:

- | | | |
|-----|----|---|
| May | 1 | Paid Tk. 1000 for office rent of the month. |
| | 3 | Purchased Tk. 1000 of supplies on account. |
| | 5 | Paid Tk. 150 for advertisement in the Daily Star. |
| | 9 | Received Tk. 3000 for the services provided. |
| | 12 | Withdrew Tk. 800 cash for personal use. |
| | 17 | Paid Tk. 3000 for employee' salaries. |
| | 20 | Paid for the supplies purchased on account on May 3. |
| | 23 | Received a cash payment of Tk. 2000 for services provided |
| | 26 | Borrowed Tk. 6000 from the bank on a note payable. |
| | 29 | Purchased office equipment for Tk. 2300 on account. |

Instruction: Show the effects of the previous transactions on the accounting equation in tabular form.

2. The Adventure Park was started on April 1 by Al Rosssy. The following events and transactions occurred during the April:

- | | | |
|-------|----|---|
| April | 1 | Rosssy invested Tk. 60,000 cash in the business. |
| | 4 | Purchased Land for Tk.30, 000 for cash. |
| | 8 | Incurred Advertising expenses of Tk. 1,800 on account |
| | 11 | Paid salaries to employees Tk. 1,500. |
| | 12 | Hired park manager at a salary of Tk. 4,000 per month effective from May 1. |

- 13 Paid Tk. 1,500 cash for a one year insurance policy.
- 17 Withdrew Tk. 600 cash for personal use.
- 20 Earned Tk. 5,700 for admission fees but not yet received
- 30 Cash received from customer TK 5000.
- 30 Paid Tk. 700 for advertising incurred at April 8

Requirement:

a. Journalize the transactions.

b. Post the journal entries to ledger [Control Ledger Accounts are Cash, Accounts Payable]

3. Muddy River Resort opened for business on April 1, 2008 with eight air conditioned units. Its trial balance before adjustment on August 31, 2008 is as follows:

Muddy River Resort
Trial Balance at August 31, 2008

Number	Particulars	Debit	Credit
1	Cash	65,600	
2	Supplies	3,300	
3	Prepaid Insurance	6,000	
4	Land	25,000	
5	Cottages	125,000	.
6	Furniture	26,000	
7	Account Payable		6,500
8	Unearned Rent		7,400
9	Mortgage Payable		80,000
10	P.S. Capital		100,000
11	P.S. Drawing	5,000	
12	Rent Revenue		80,000
13	Repair Expense	3,600	
14	Salaries Expense	5,000	
15	Utility Expense	9,400	
		<u>273,900</u>	<u>273,900</u>

Other information: (1) Insurance policy is for 2 years (2) Account on August 31 Shows Tk. 500 of supplies has now on hand (3) Furniture has 5 years life with no salvage value which cost is Tk. 26000 (4)Tk. 3,500 of the balance in the unearned rent revenue account remain unearned at the end of the month. (5) Utility expense is accrued Tk.1000 per month (6) Rentals of Tk.1200 were due from tenants at August 31 (7) Tk. 5000 of dividend revenue has earned but not yet been recorded.

Instructions:

Prepare the adjusting journal entries