



Tutorial 10			
CM1601: Programming Fundamentals			
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Stage	1		
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You will gain knowledge about the following concepts at the end of the tutorial:

- Working with a public repo to collaborate with a team
- Creating a CRUD application using a database.
- Creating a GUI interface

Instructions

- Form FIVE Teams within the students present in the tutorial group. Minimum of three members is required in a team, if there are less students.
- Clone the public repo corresponding to your tutorial group.
- The repo consists of modules of the voter application. Each team picks one module.
- Divide the operations (analyse the cloned code) among your team. More than one student can work together to implement one operation of the module.
- The cloned repo will have the base structure, method names, classes to get you started. However you would require to implement the methods.

Modules

Module	SQLite database	SQLite main table name	Primary Key	
Login Management	This module is an example template you can follow			
Voter Management	voter.db	voter	iitNumber (numeric)	
Candidate Management	candidate.db	candidate	id (numeric)	
Ballot Management	ballot.db	ballot	id (numeric)	
Committee Management	committee.db	committee	id (numeric)	
House Management	house.db	house	name (string)	

You would need to (as a team):

- 1. Decide data points you would need to store.
- 2. Decide any additional table you would require. You can simulate id numbers if you require them for foreign keys. Example if you need both candidate and voter for the Ballot module, simulate by typing inputs from the keyboard.
- 3. Implement the selected operation. You may add more operations to complete the functionality.
- 4. Implement a menu system. Menu system will collect inputs from the user and call the respective functions by passing them as arguments.
- 5. At the end of the tutorial, push the working code back to the remote repository.

Git Hub Repo Urls:

Group A = https://github.com/cassim-iit/TutorialTenA.git

Group B = https://github.com/cassim-iit/TutorialTenB.git

Group C = https://github.com/cassim-iit/TutorialTenC.git

 $Group\ D = https://github.com/cassim-iit/TutorialTenD.git$