**Code Link & UML**

**Code Link:**  **https://github.com/Tahim2/Electricity-Billing-System**

**UML**

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| --- |
| <<Billable>> |
| -customers: ArrayList<Customer> |
| +calculateBill |

|  |
| --- |
| ResidentialCustomer |
| - unitsConsumed: String |
| +ResidentialCustomer()  +calculateBill(): double  +applyLateFine(): double |

|  |
| --- |
| CommercialCustomer |
| -unitsConsumed: String |
| +commercialCustomer()  + calculateBill(): double  - applyLateFine(): double |

|  |
| --- |
| *Customer* |
| #customerId: String  #name: String  #address: String |
| +getCustomerId(): String  +Customer(): void  +calculateBill(): double  +getName(): String  +getAddress(): String  +*calculateBill()*: double |

|  |
| --- |
| ElectricityBillingSystem |
| -customers: ArrayList<Customer>  -fileHandler:FileHandler |
| +main(args: String[]): void  +log(message:String): void |

|  |
| --- |
| FileHandler |
| -fileName: String |
| +FileHandler()  +reaaadCustomerFromFile():ArrayList<Customer>  +writeBillToFile(): void |