

1. Report of the work done

The designed system record and display customers, cost of calls and the phone calls.

The Database has been designed to updates the bill upon registration of new phone call. So that the end of every month a reduction of an amount of 100 francs is done per phone call toward customers of the company only if the total amount of the bill is higher than 5000 francs.

The application has been written in PHP 7 and uses MySQL Database to store data.

This has been made by a trigger on the database level and also on the application side.

Here is the trigger:

```
DELIMITER
CREATE TRIGGER monthlyEvent
ON SCHEDULE EVERY 1 MONTH
DO
BEGIN
FOR EACH ROW DECLARE amt DOUBLE , customer_id int,callNumber
int,idBill int;
    SELECT amount as amt, CustomerId as customer_id FROM `bill`
where Month_Bill = MONTH(NOW()) and Year_Bill = YEAR(NOW());

    if amt>5000 THEN
        callNumber= ( SELECT count(*) FROM phonecall WHERE CustomerId =
customer_id ) ;
        UPDATE SET amount=amt-(callNumber*100) where id = idBill;

    ELSE

    END IF

END
DELIMITER
;
```

2. Application Demo : Just click [Billing System](#)

3.List of scripts of the created database

```
CREATE TABLE `customer` (  
  `CustomerID` int(11) NOT NULL AUTO_INCREMENT,  
  `name` varchar(44) DEFAULT NULL,  
  `surname` varchar(44) DEFAULT NULL,  
  `phoneNumber` varchar(44) DEFAULT NULL,  
  `costPlan` int(11) DEFAULT NULL,  
  PRIMARY KEY (`CustomerID`)  
) ENGINE=InnoDB DEFAULT CHARSET=latin1
```

```
CREATE TABLE `costplan` (  
  `Code` int(11) NOT NULL AUTO_INCREMENT,  
  `costAtResponse` double NOT NULL,  
  `costPerSecond` double NOT NULL,  
  PRIMARY KEY (`Code`)  
) ENGINE=InnoDB DEFAULT CHARSET=latin1
```

```
CREATE TABLE `bill` (  
  `CustomerId` int(11) NOT NULL,  
  `Month_Bill` varchar(22) NOT NULL,  
  `Year_Bill` varchar(22) NOT NULL,  
  `amount` double NOT NULL,  
  `id` int(11) NOT NULL AUTO_INCREMENT,  
  PRIMARY KEY (`id`),  
  KEY `Fkcust` (`CustomerId`),  
  CONSTRAINT `bill_ibfk_1` FOREIGN KEY (`CustomerId`) REFERENCES `customer`  
  (`CustomerId`)  
) ENGINE=InnoDB DEFAULT CHARSET=latin1
```

```
CREATE TABLE `phonecall` (  
  `CustomerId` int(11) NOT NULL,  
  `Date_Call` date NOT NULL,  
  `Time_Call` time NOT NULL,  
  `calledNumber` varchar(16) NOT NULL,  
  `duration` varchar(15) NOT NULL,  
  KEY `fkcust` (`CustomerId`),  
  CONSTRAINT `phonecall_ibfk_1` FOREIGN KEY (`CustomerId`) REFERENCES  
  `customer` (`CustomerId`)  
) ENGINE=InnoDB DEFAULT CHARSET=latin1
```