

Operation Manual

VIRTUAL CLASS ROOM – ANDHRA PRADESH

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- ▶ Introduction to Virtual Class room
- ▶ Equipment installed in a Virtual Class room and its operation
 - Laptop with the Class room application
 - Tab with Interaction Query application
 - Projector & Screen
 - Audio System
 - APSFL Modem
 - Sine wave UPS
 - External batteries
 - Interactive pen and Pad
 - Web Camera
- ▶ Equipment Storage Overview
- ▶ Real Time Responsive Clicker System
- ▶ Dos and Don'ts

Introduction:

Virtual Class Room (VCR) aims to offer quality education to the students of the government schools in the State by transforming the normal classrooms into virtual classrooms and the live classes being delivered by experts from the studios.



Image 1



Image 2



Image 3

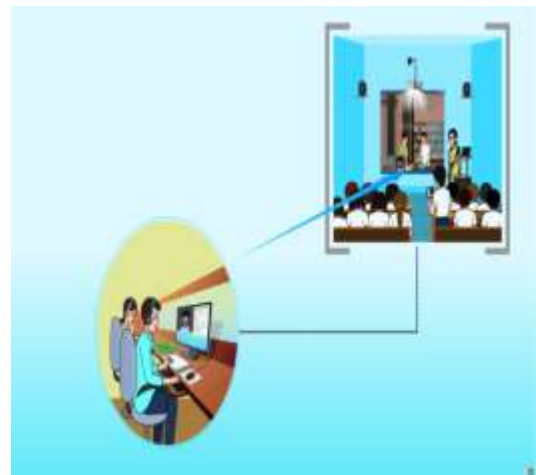


Image 4

The above pictures explain the entire process of the working of virtual class rooms.

- The teachers residing at the respective studios will deliver the classes as per the predefined schedule which will be transferred to the NOC (Network Operation Center) via the internet. From the NOC, live classes will be delivered to all the connected schools with the help of internet (**image1**).
- Students listening to the class can be seen in the image above (**image 2**).
- As seen in the next image (**image 3**), whenever a student has a doubt with respect to that particular class, he/she can get it cleared by asking the same to the moderators as seen above.
- The moderator responds to the query asked by the student and will clear the doubt which will be displayed to the entire class as seen in the last image (**image 4**).

LAPTOP



Connecting Cables to Laptop



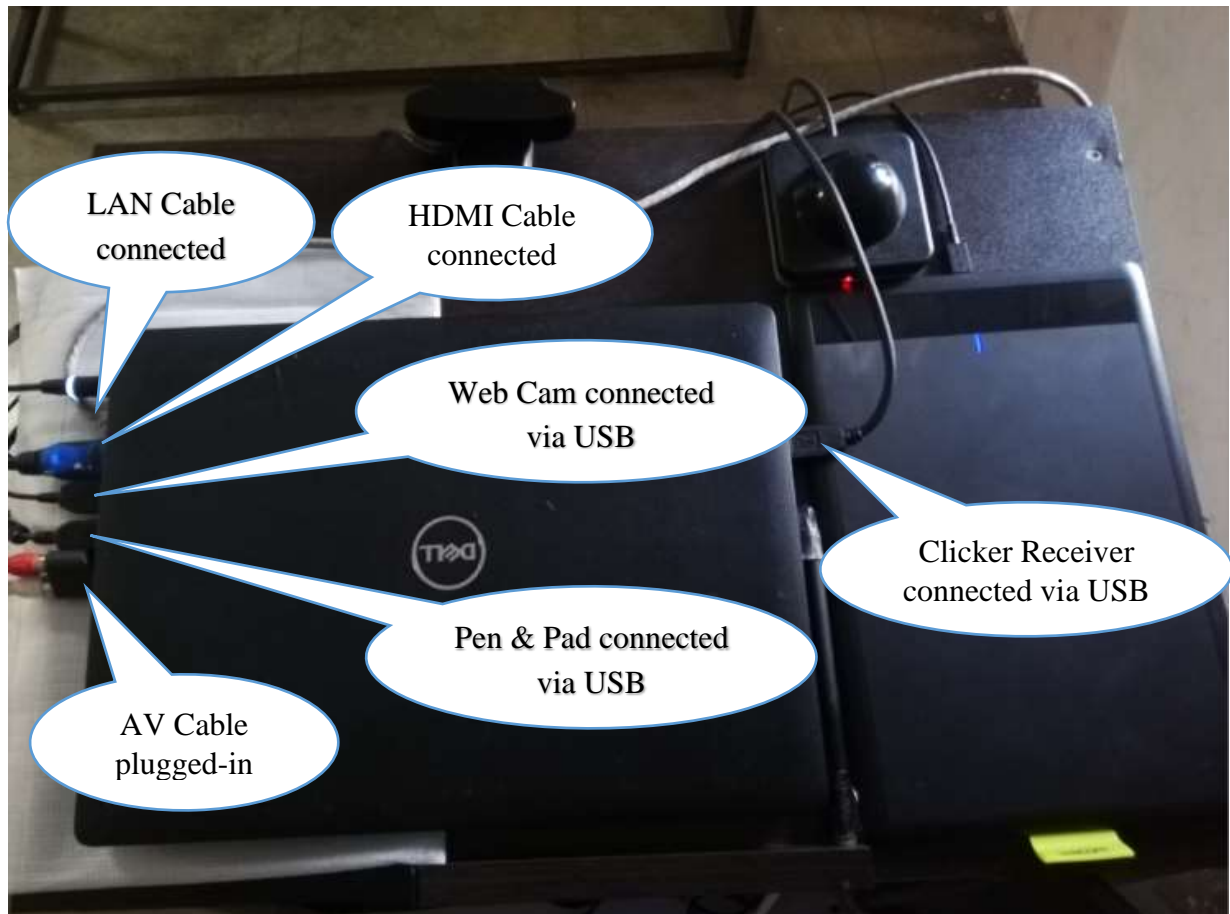
Charger
Port

LAN Port

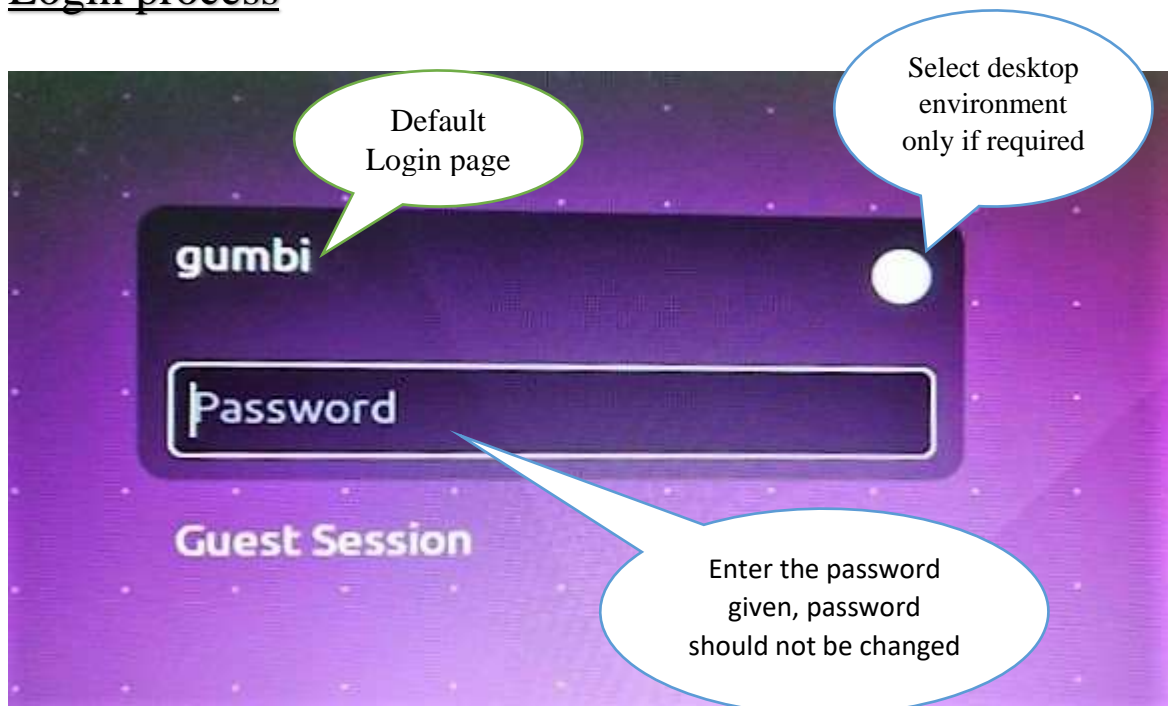
HDMI
Port

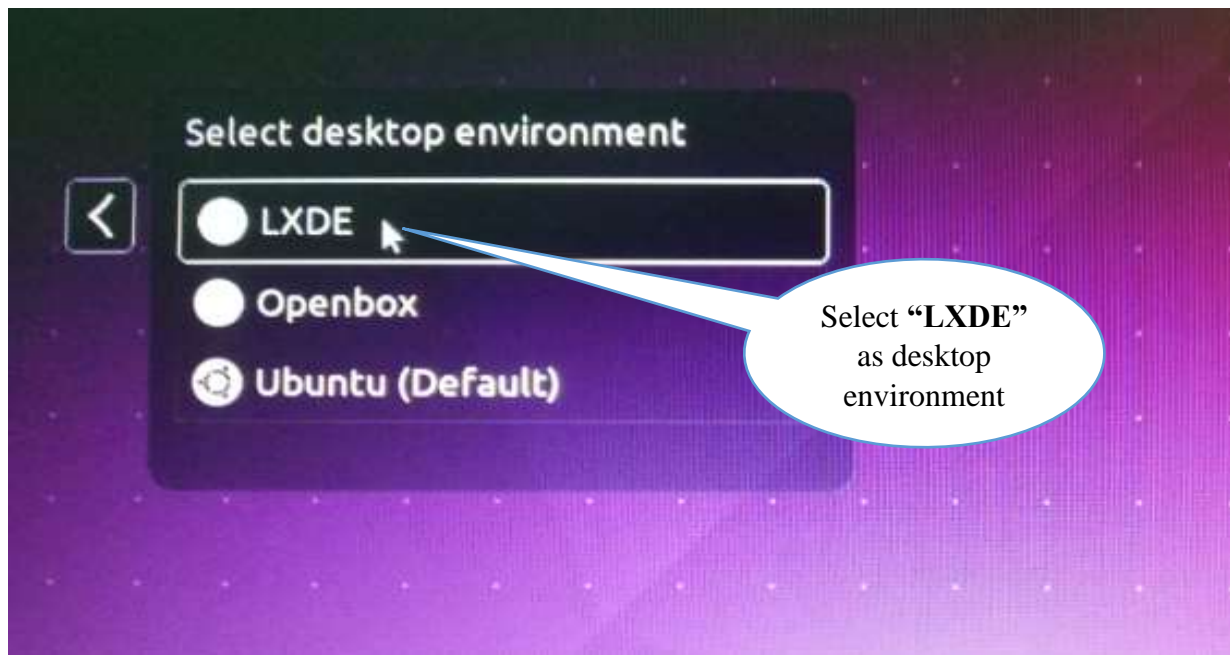
USB
Ports

Audio
Port

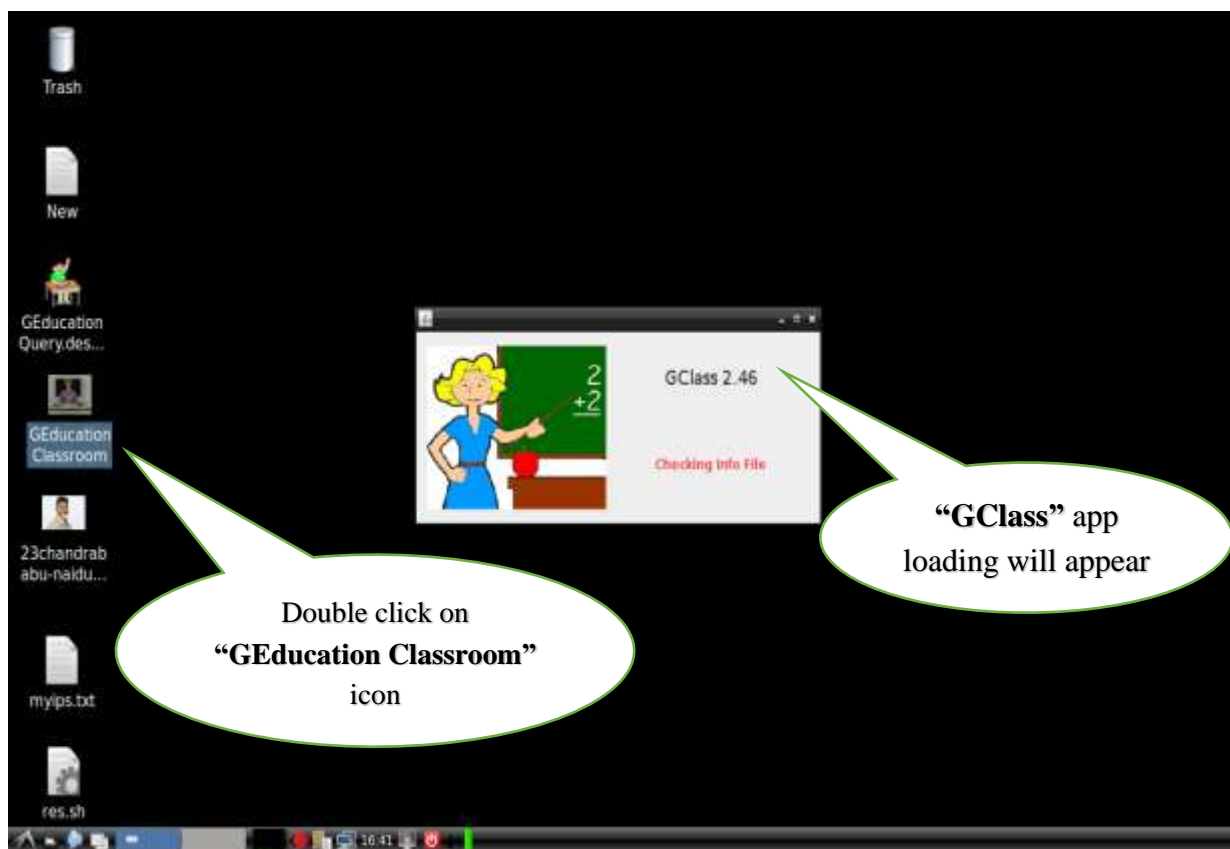


Login process





Running "LIVE CLASS"





Select the studio you want to connect



After selection Click on “Set Studio”

Your School Disecode

Receive Via “Network”

Protocol “MCAST”

Webcam “Logitech Webcam”

Channel “CM”

Click on “Set” after selecting required options

Note: Once classroom is set, do not change parameters unless asked or required.

Click here & drag towards projection

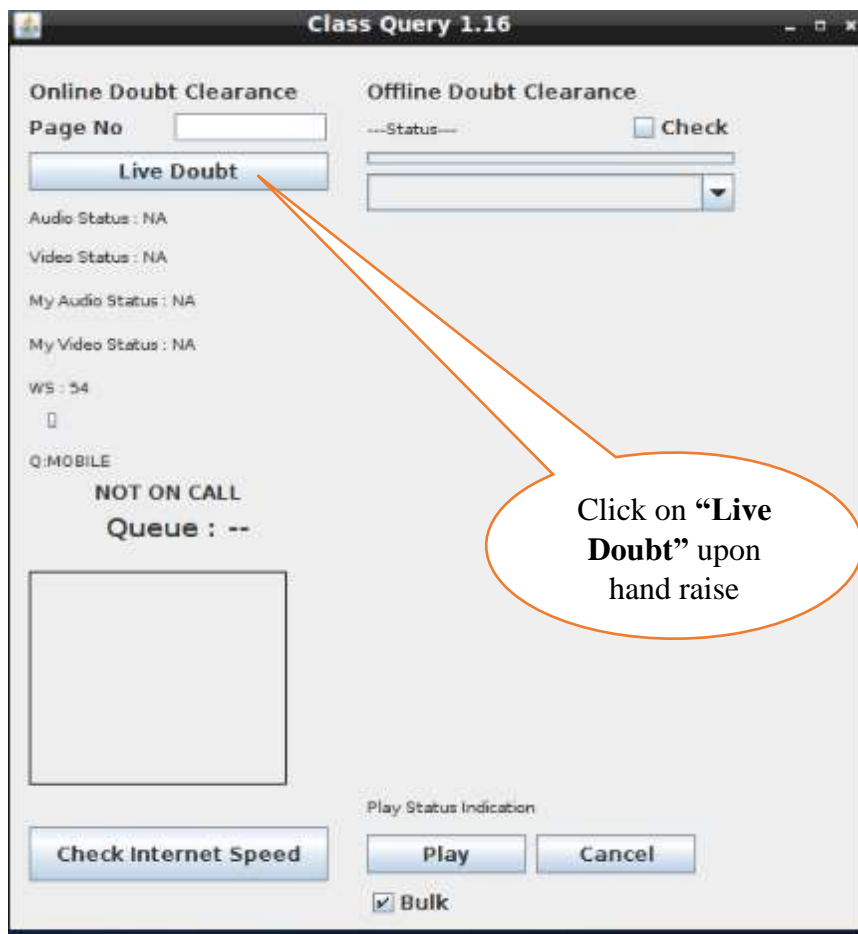
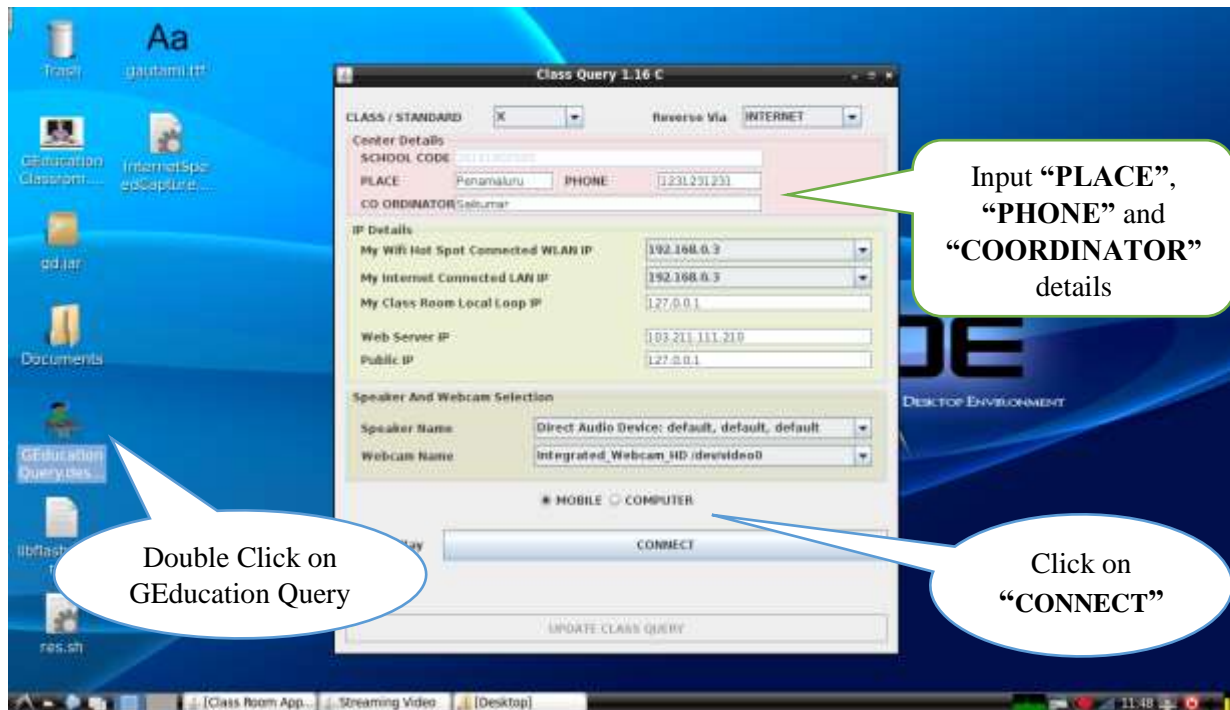
Teacher or Expert

Content

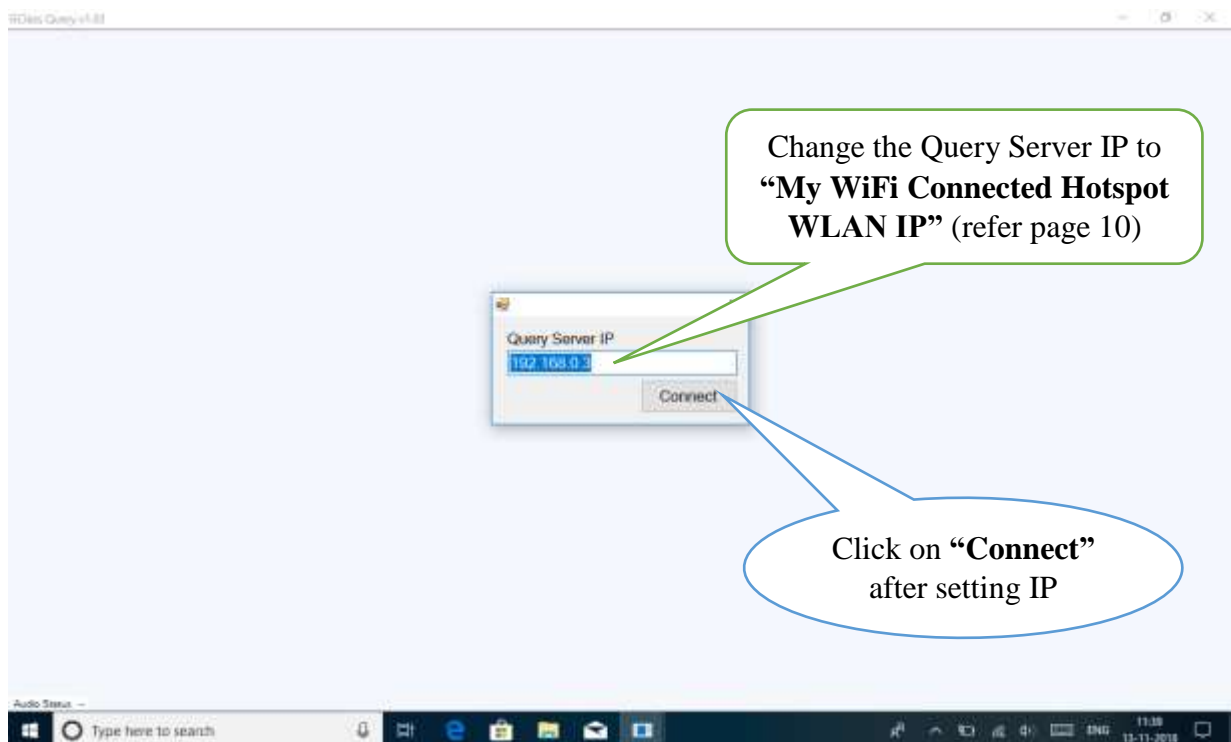
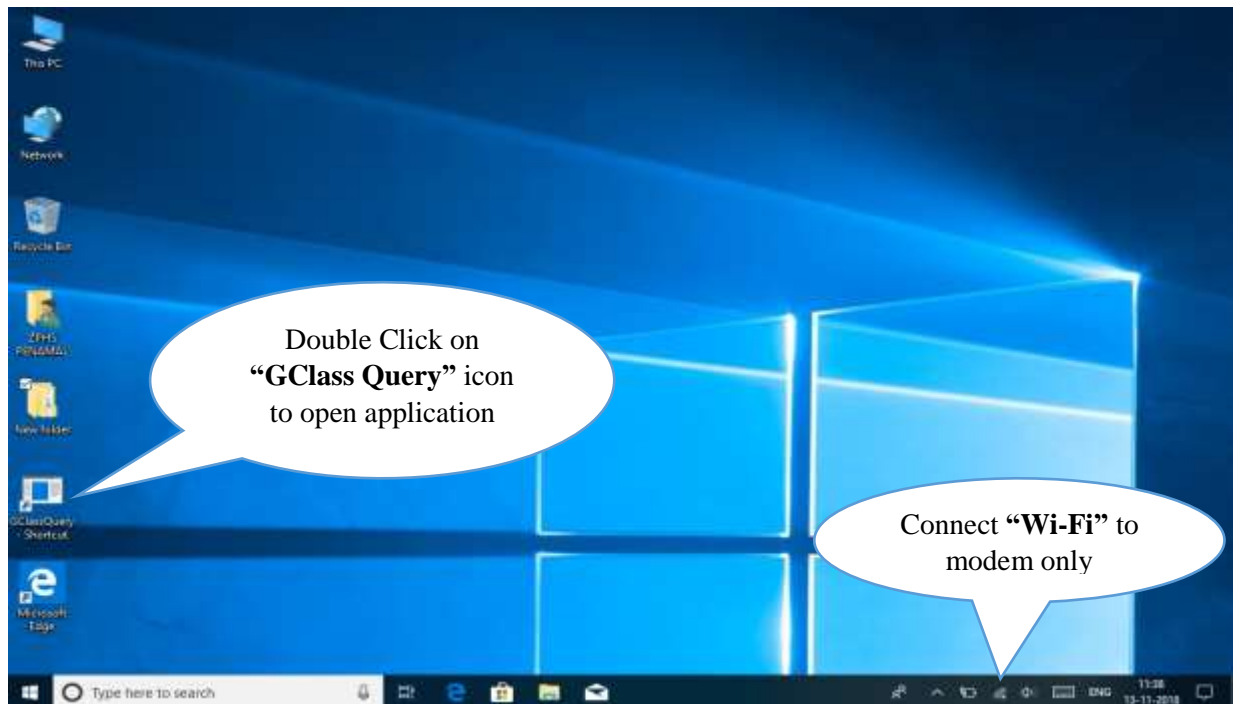
Click on "X" button to close application

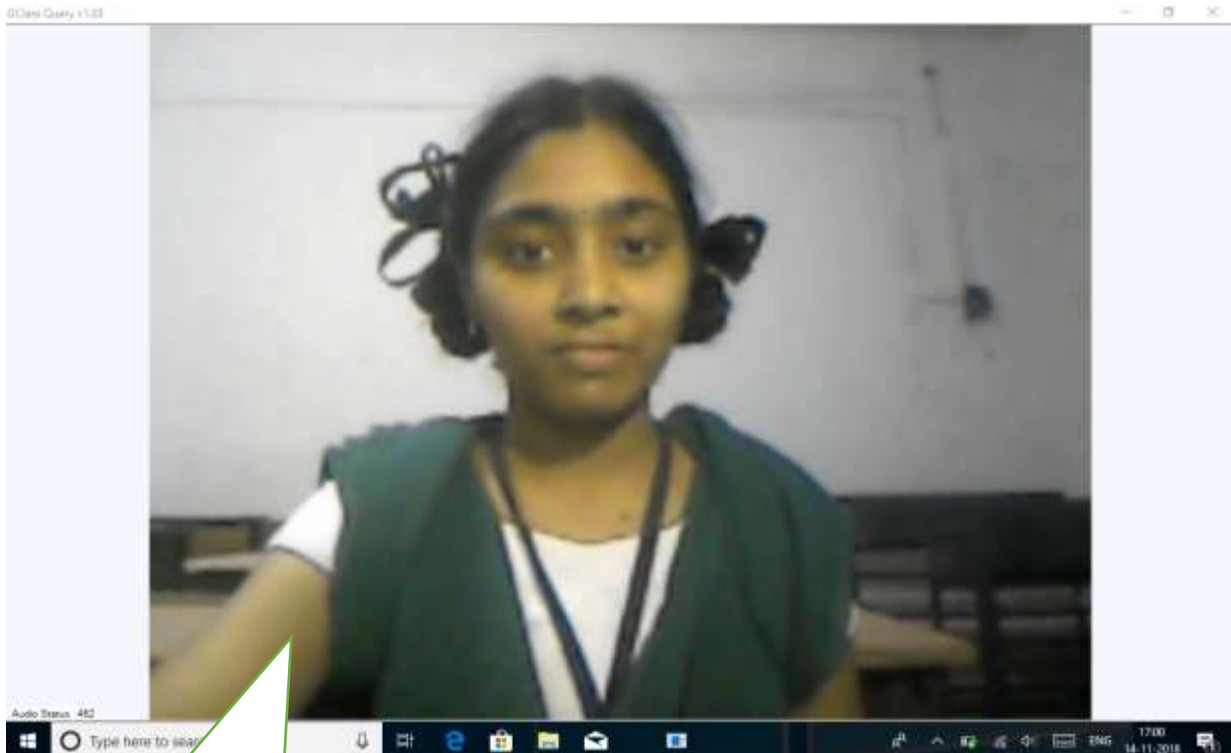
Select "Yes" to exit the application

Live Class Query (Laptop) – To ask doubt



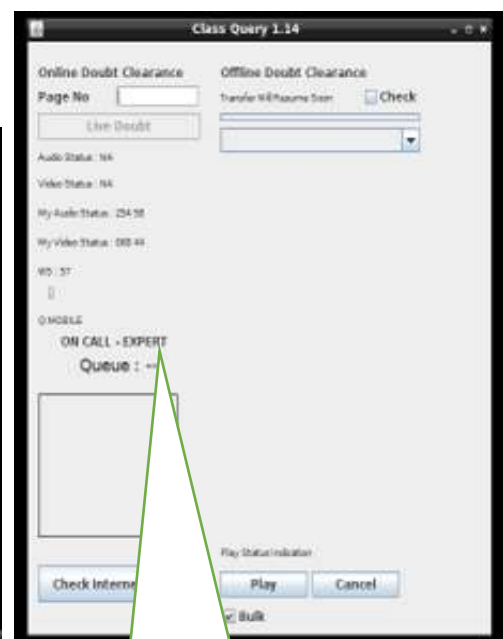
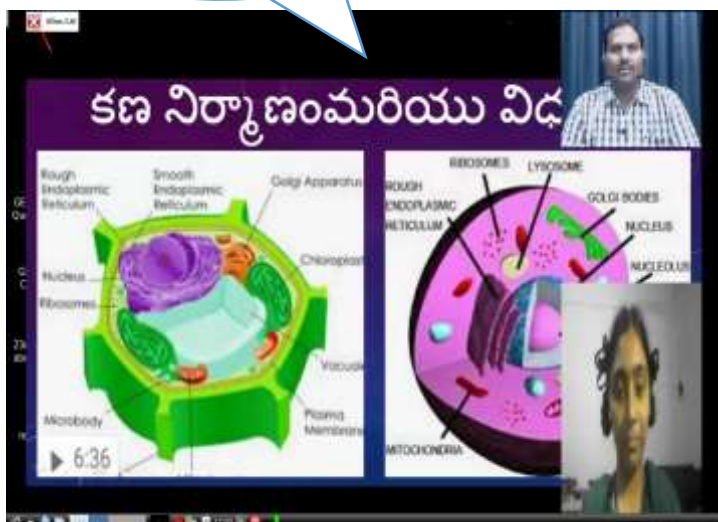
Live query Application (Tablet) – used by student





Once connected, front camera will be activated and should wait for the Expert/Moderator to start interaction

Screen showing expert, content and student



Once call is answered status changes to “ON CALL” showing Expert/Moderator

Projector

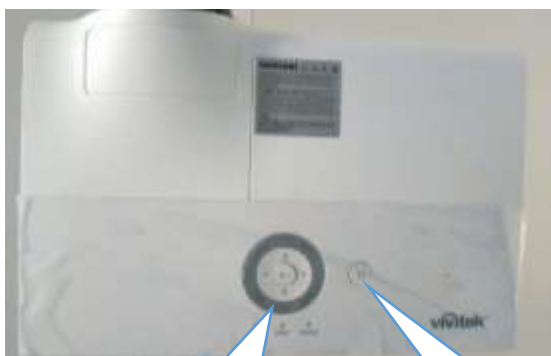


1. Projector top view



2. Projector remote

- Switch on the projector by pressing the **Power** button (Green colour) only using remote.
- Once Power Button is pressed, LED starts blinking which indicates projector is booting (please note it may take atleast 2min to switch-on).



Menu Panel and
LED Indicators



Projector
ON/OFF Button

Projector LED
post switching on



Power Cable

HDMI Cable

Operating Projector Screen



Hold the ring and
pull Screen till the
marked point and
leave it gently



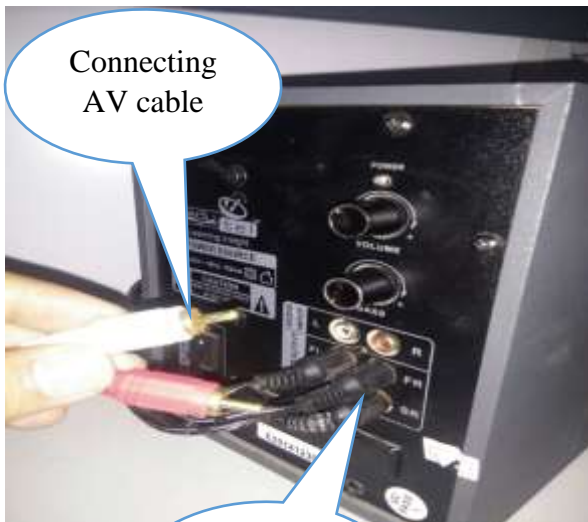
Projection
displayed on
screen

Audio System



Power Button
"ON/OFF"

AV input cables from Laptop and
4 output cables to speakers to be
connected in these ports



Connecting
AV cable

Speaker
cables being
connected



Once woofer is powered and switched
ON, a blue LED will glow. Keep Bass
minimum always during live session and
adjust the volume as required

APSFL MODEM



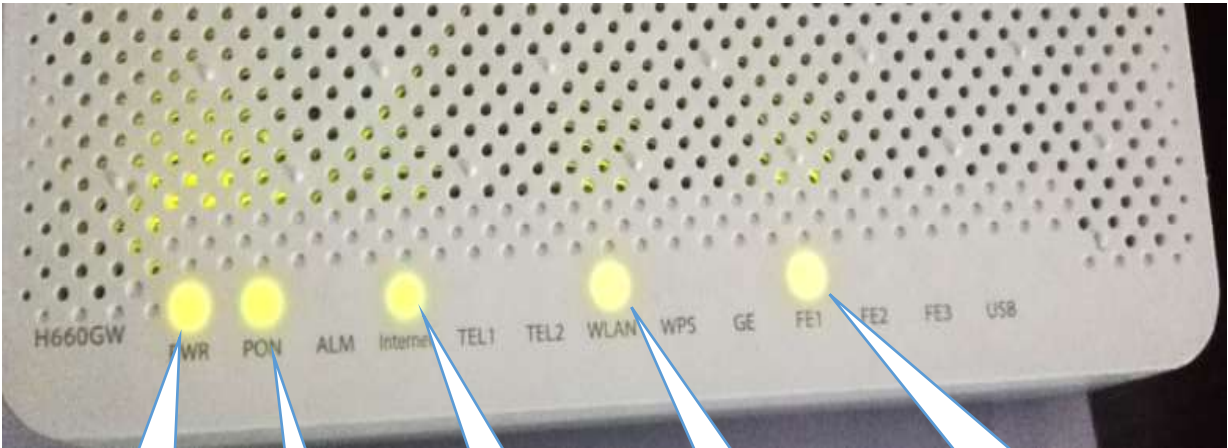
Bottom View
(GPON, S/N
& Password)



APSFL
Fiber cable

AC power
input cable

LAN Cable
connected to
LAN Port



Power ON
Indicator

PON should
glow to get
internet

Internet
working

Wi-Fi
Active

Ethernet LAN
Connected

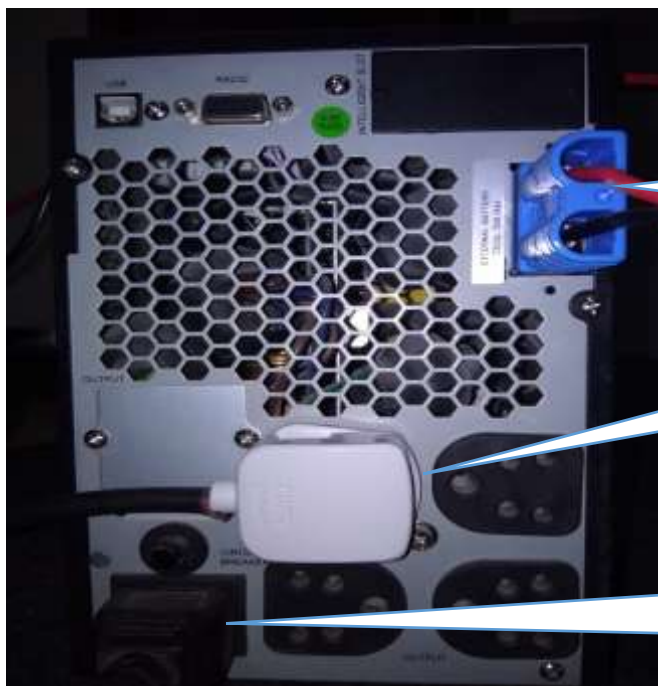
Sine wave UPS



UPS LED
Display

UPS OFF
button (Press &
hold 6-9Sec)

UPS ON/MUTE
button (Press &
hold 6-9Sec)

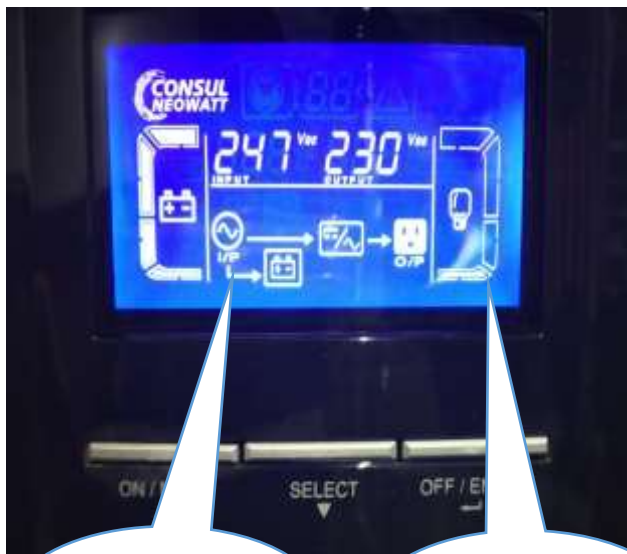


External
Batteries to
UPS

UPS 4 output
ports

AC Input
power chord
from Main
power supply

UPS Display



AC I/P ON &
UPS O/P ON

O/P Load on
UPS



AC I/P OFF & UPS
O/P ON (Running
on batteries)

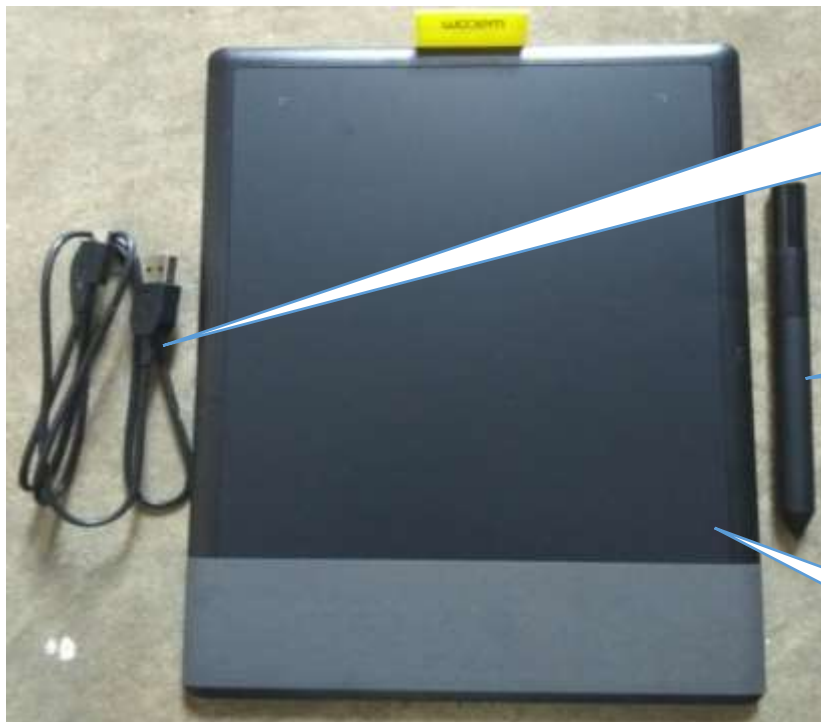
Batteries Connection



6 Series
connected 12V
Batteries each

Cascading cables
connecting all
batteries

Interactive Pen & Pad



Interactive Pad
USB Cable to
connect to
laptop

Interactive
Pen

Interactive
Pad



LED Indicator will
on if connected to
Laptop

Interactive Pad
connected to laptop

Web Cam



Logitech HD Web Cam

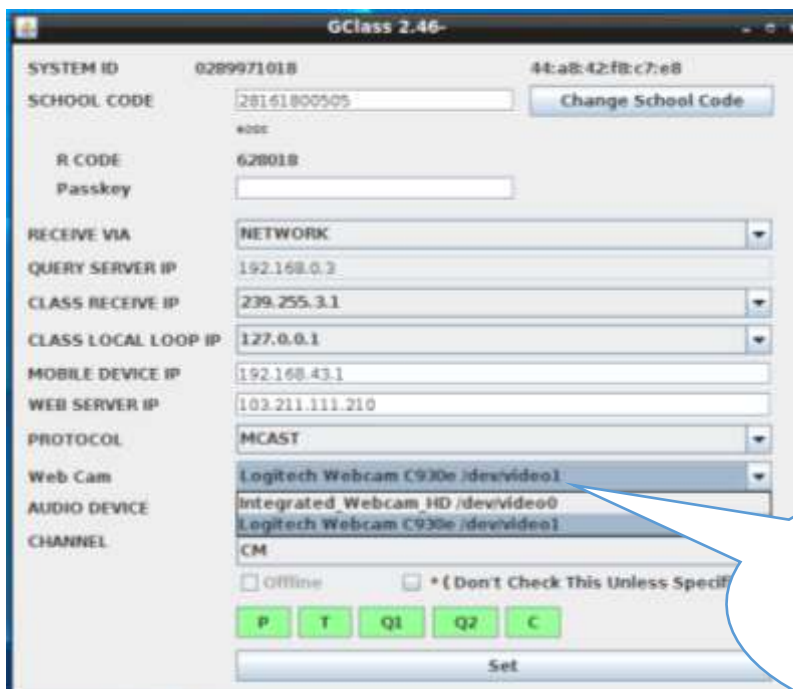
WEB CAM Connected to USB port of laptop

Female port to be connected to Web cam

USB Extender



To be connected to laptop



Web cam light turns ON if connected

Select Logitech Webcam from the dropdown Menu in GClass Application

Storage/Podium



Front view of
Podium

Space for Laptop

Clickers rack

Space for
Woofer and
Extension Box



Space for
UPS

Space for
batteries

All Equipment placed
inside the storage

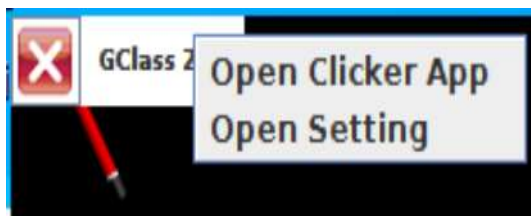


Clickers Operation Procedure

- ▶ Open G-Class Application
- ▶ On the Left top side of the Application there will be GEducation Class Version no (example : GClass 2.46)

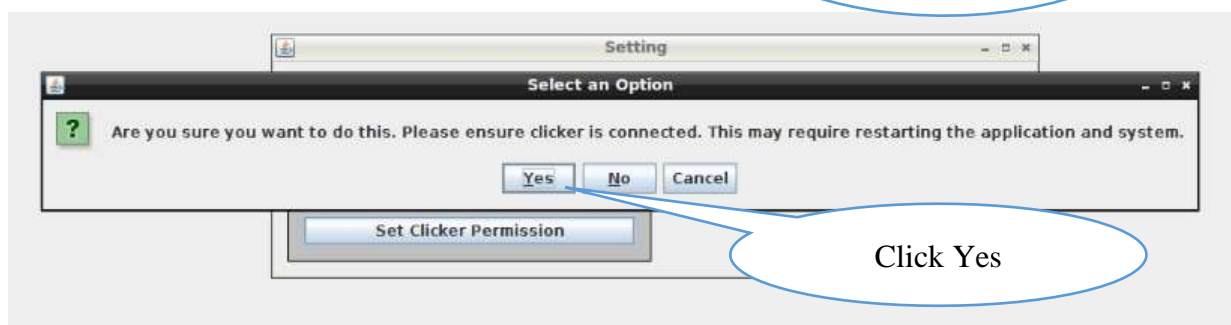
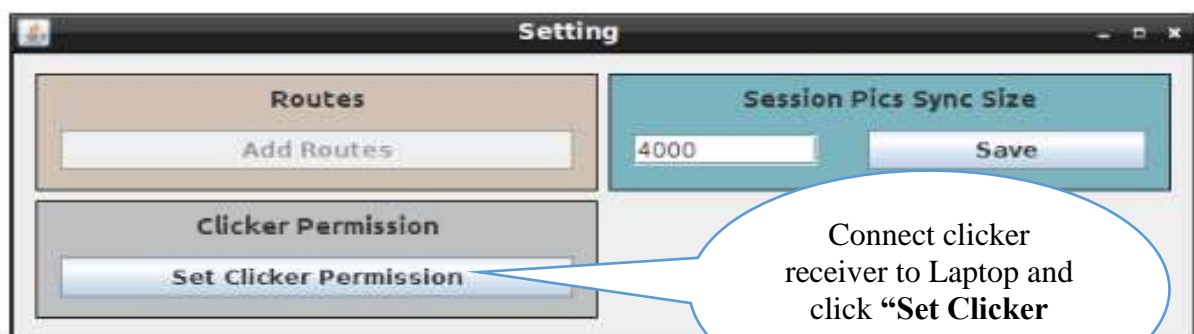


- ▶ Right Click on Version no



- ▶ There will be Two options 1) Open Clicker App 2) Open Setting

Upon clicking on “OPEN SETTING” below image will be displayed





Upon clicking on “**OPEN CLICKER APP**” below image will be displayed



Clicker Registration



Click on Register Clicker and check Quick Registration to complete the registration for each clicker.

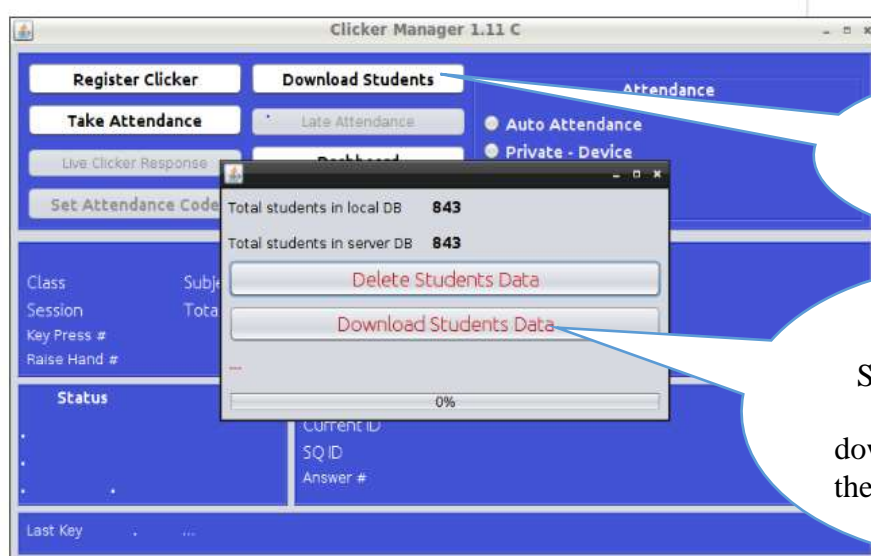
During registration process select same color of clicker which you are going to register, press all buttons and click on save button.

Note: When you press a button white color changes to Green which you can see in the Clicker image.

Repeat the same process for remaining 39 clickers and close the dialog box.



Download Student Database from server



Click Download Students option

Click Download Students Data, wait until all the data downloads from server then close the window.

Taking Attendance using Clickers



→ Click on Take Attendance in clicker manager window.

→ Attendance Screen will be Displayed with Roll No's like this.



→ When Roll No's are clicked, the Yellow button turns to Green color.

→ If Boxes blinking with Red color, click on Release wrong roll nos.

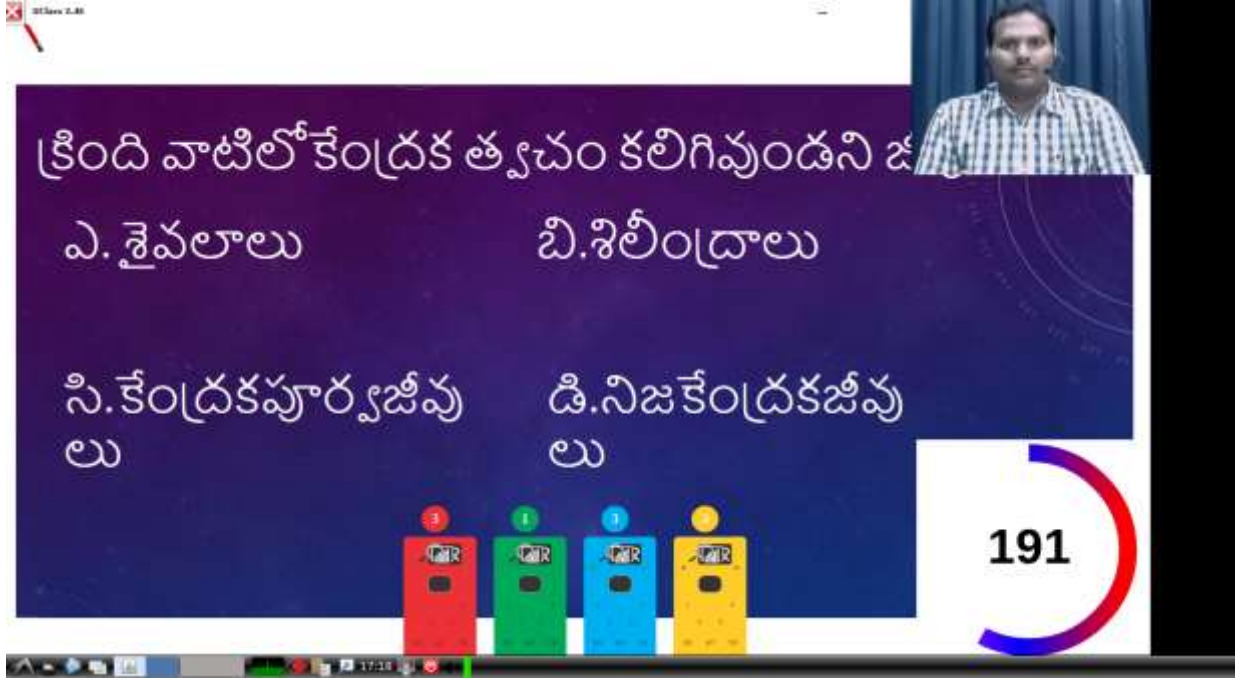


→ After Enrolling Click on Save Attendance and Close.

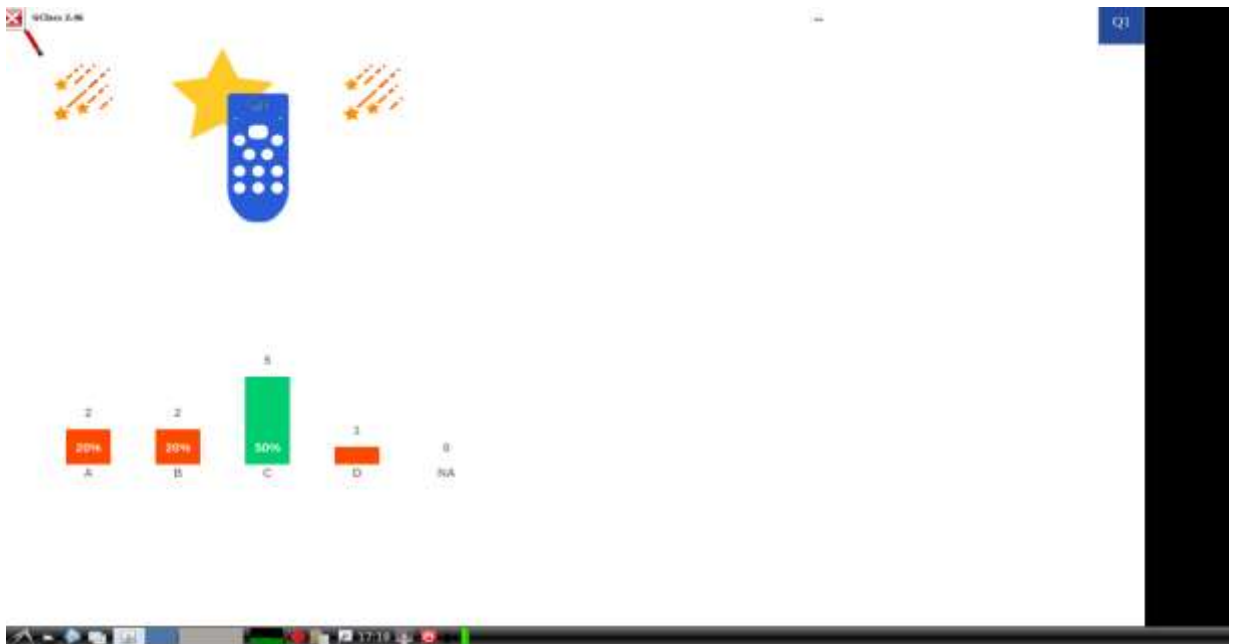
→ Pop-up appears as Marked Attendance, click on ok.

Using Clicker

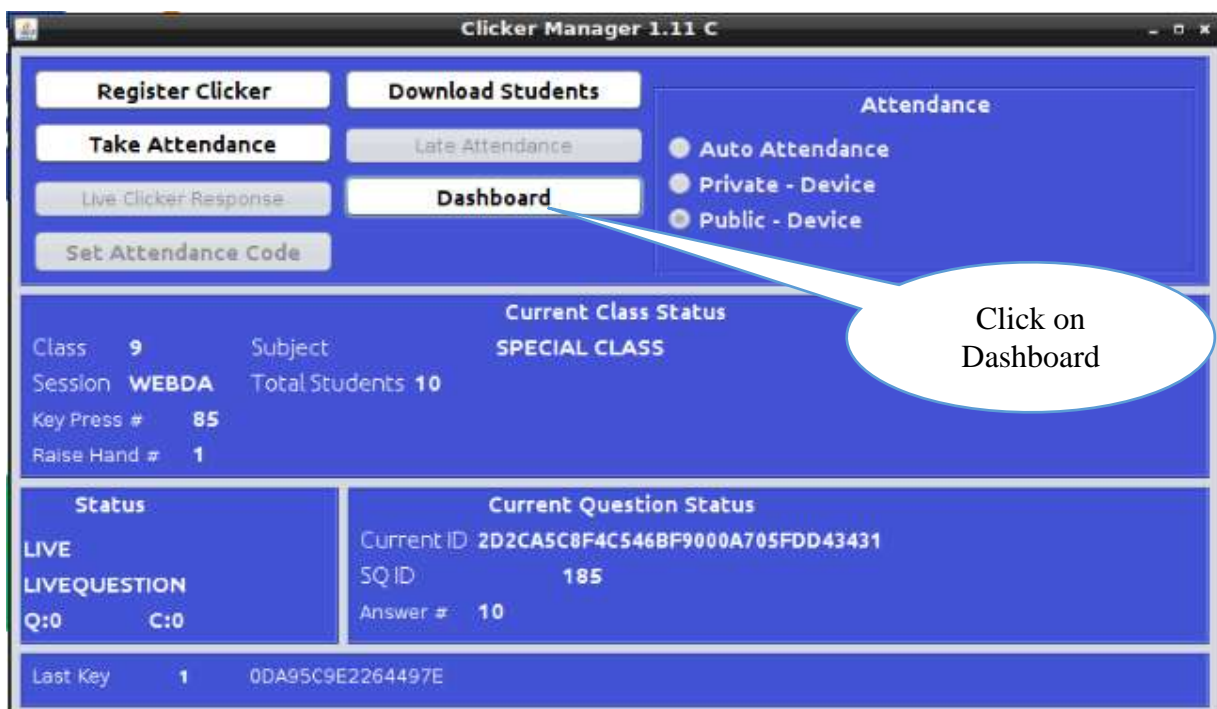
- While running Live session, Expert will raise a Multiple Choice Question where Students need to answer with clicker selecting correct option



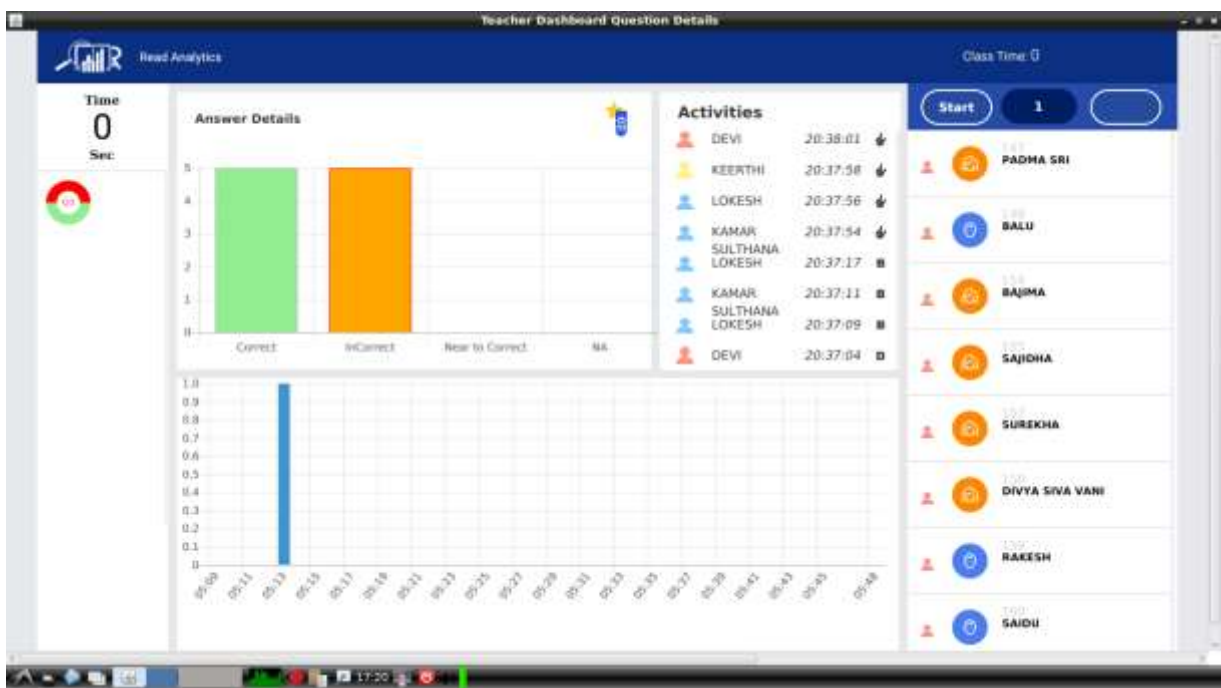
- Clicker result will show once the Question is completed.



→ Click on Dashboard in Clicker Manager to view results.



→ Teacher has to Open Dashboard in Clicker Manager Screen in order to view Hand-Raises and Results



Do's:

1. Before turning on the laptop, check whether all the required cables (HDMI, Audio jack, Laptop charger, Clicker Receiver, Wide angle camera, Interactive pen and Pad and LAN) routing from different equipment to the laptop are in place and connected properly.
2. Place all the equipment in the defined slots of podium while not in use.
3. Handle equipment gently and ensure all equipment is free of dust.
4. Issues (Network, hardware, Software, LMS, Live delivery) to be reported to HDT and a reference number should be taken duly.
5. Ensure proper earthing is provided to the room where VCR is installed and please ensure a periodical check is carried out.
6. A register to be maintained at the school for any technician visit and work done by him which has to be duly signed by technician.
7. UPS to be left in charging mode during holidays and after school hours.
8. All Passwords are to be made a note and to be submitted in Headmaster's office.
9. Material inward/outward movement to be maintained in the register with a signature from both parties.
10. Projector always has to be operated via remote.
11. Bass of the woofer to be kept at minimum during live class.
12. Projector screen to be unrolled slowly and to be used gently.
13. VCR equipment has to be used only for watching live classes, Queries, LMS and Clicker interaction.
14. Clickers to be issued and collected before and after every live class.

Don'ts:

1. Do not unplug the cables when the laptop is in use, turn off the laptop and input power to remove any cables connected to it.
2. Do not allow dust to accumulate over the equipment. Ensure it is cleaned with dry cloth periodically (15 days once).
3. Podium not to be pulled/dragged for any kind of purpose, this has to be notified to HDE and their instructions to be followed.
4. No calls to be made directly at first instance to operations team on field or in office team.
5. Do not allow external parties (untrained staff/students/outsideers) to operate the VCR equipment in your presence/absence.
6. Main power to the UPS Supply not to be switched off at any point of time.
7. UPS output not to be switched on post usage; it has to be kept in charging mode.
8. Default passwords are not to be changed.
9. Servicing by external parties is strictly not recommended, it may lead to loss of warranty and AMC and equipment malfunction.
10. Projector should not be operated from top panel.
11. Not to change the volume levels of the speaker manually. It will have been preset by technician in your presence.
12. Projector screen not be pulled further, once the black part of screen is seen.
13. Power for any external devices should not be drawn from UPS and any deviation from this is not entertained.
14. Webcam should not focus the teacher, it should focus the class room and all the students must be visible to the Webcam.