

Virtual Lab Experiment Manual

Objective: To find out the location of points using radiation method of plane table surveying.

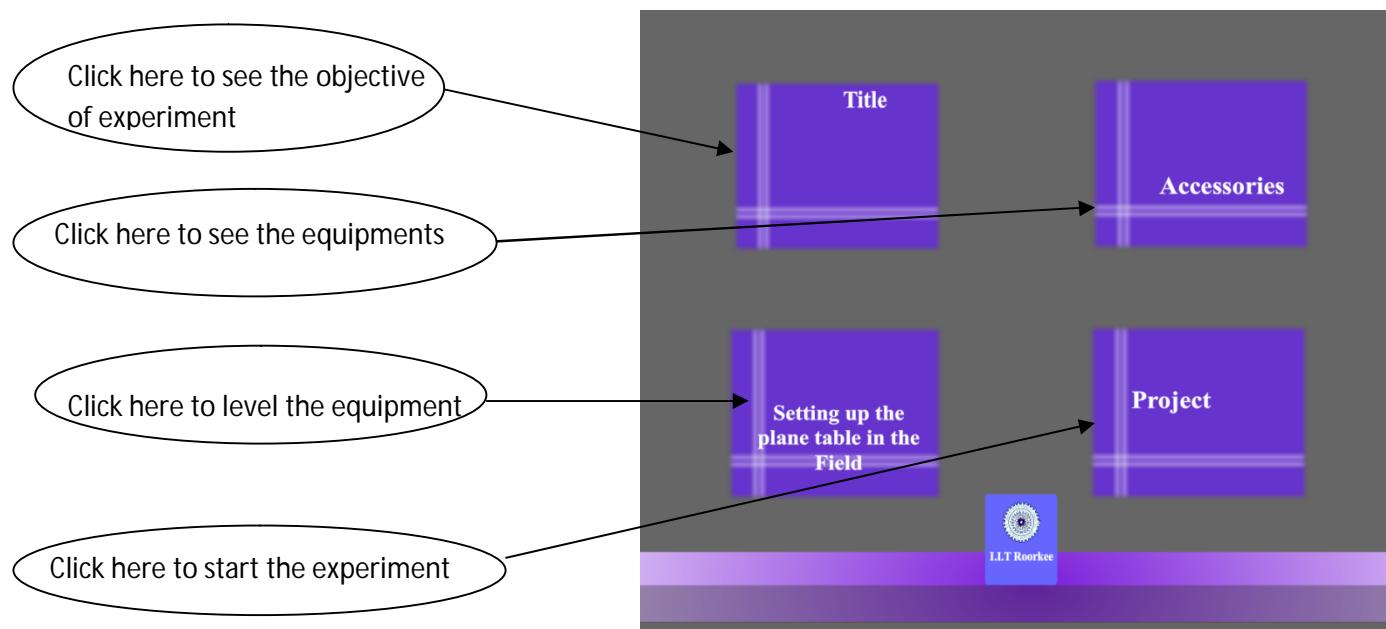
Equipment details:

1. Plane table and Tripod
2. Plane alidade
3. Magnetic compass
4. Plumbing fork
5. Spirit level
6. Telescopic alidade
7. Theodolite
8. Stadia rod
9. Measuring tape

Procedure: How to carry out this experiment in 2D environment on a computer system.

Steps to be followed:

Step 1: Click on the main file and wait until home screen appears as shown below:



By clicking on 'title' we get this window:

Plane table surveying

Radiation method in plane table is used when the area covered is small and having gentle slope.

In this method , object is plotted on plane table by knowing the direction through Alidade and measuring distance through a Tape.



Click here to go back

Method-Radiation

Home

By clicking on 'accessories' we get following screen:

Plane table and Accessories

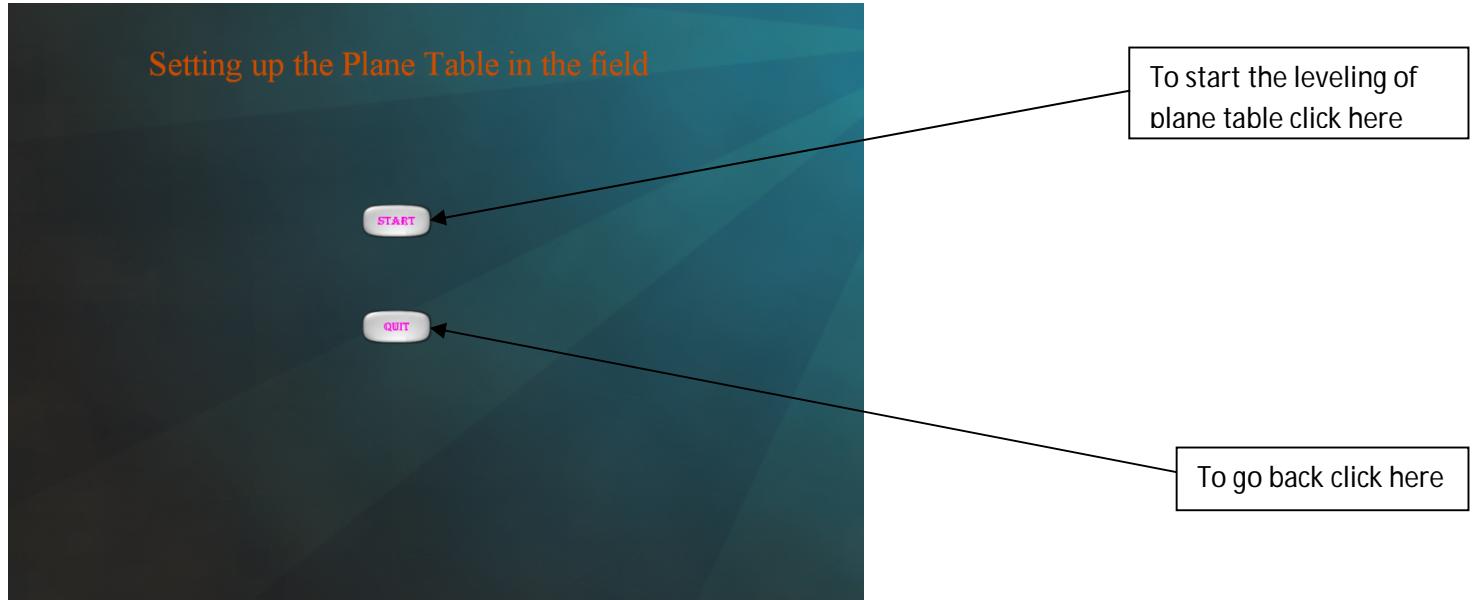
Click on the name of equipment to get its view

- [Plane Table and Tripod](#)
- Plane alidade
- Magnetic Compass
- Plumbing Fork
- Spirit Level
- Telescopic alidade
- Theodolite
- Stadia Rod
- Measuring Tape



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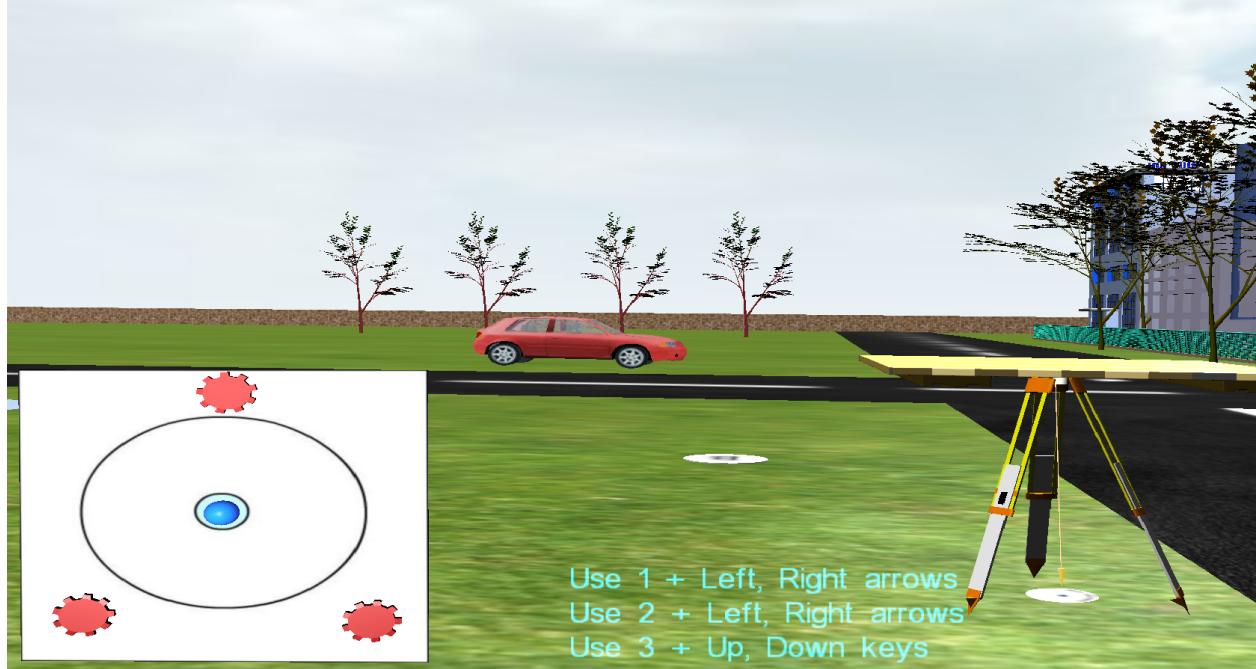
Step 2: By clicking on 'setting up the plane table in the field' following screen appears



By pressing 'start' following window appears:



Press 'L' to see leveling panel.



Leveling keys:

Use 1+ left, right arrow

Use 2+left, right arrows

Use 3+up, down keys

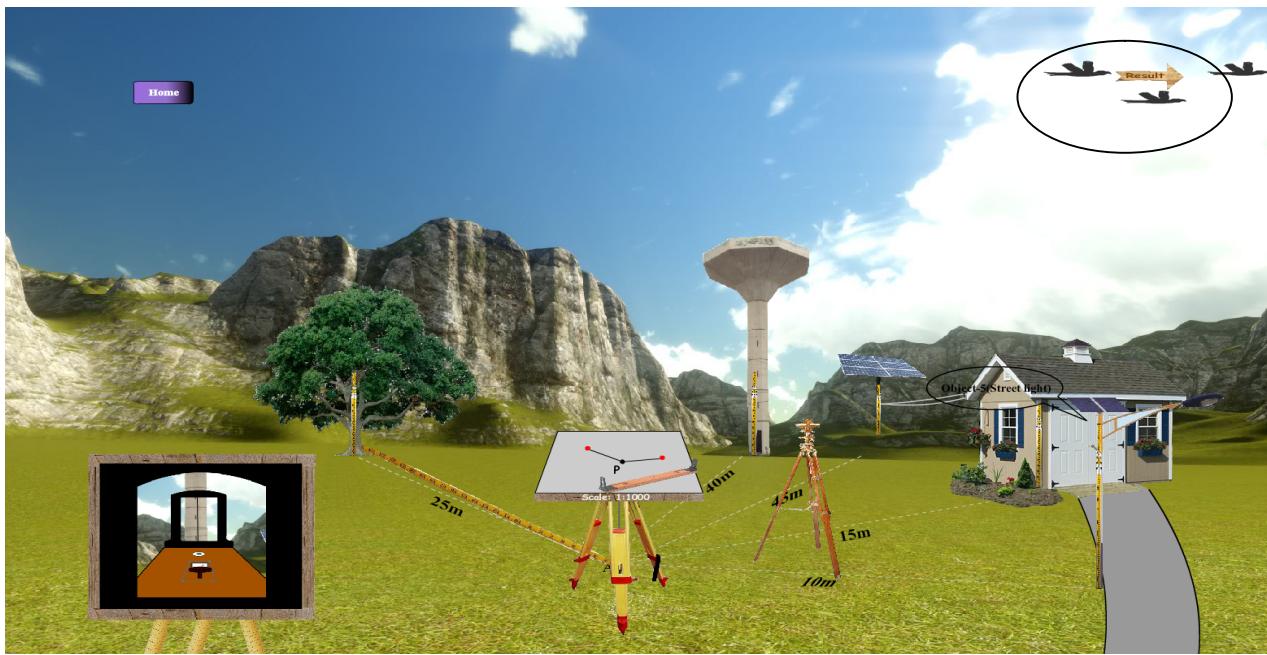
Step 3: By clicking on 'project' experiment starts and we get a 2 D and realistic environment which is user friendly:



There are 5 objects where readings are to be taken (tree, water tank, solar panel pole, house and flag).

Click on the object and we will get a telescopic view through alidade and the line is drawn parallel to the line joining the intersection of the cross hairs and the object and the length is

determined by actually scaling off the distance between them. This will lead us to following observation:



Step 4: After taking all the observations click on 'result' which is displayed in graphical form as shown:

