

Atria Institute of Technology

Bengaluru – 560024

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Department of Computer Science and Engineering



Date: 01-12-2021

DETAILS OF THE INNOVATIVE TEACHING METHODS USED BY THE FACULTY

Academic Year	2021-22, ODD SEM
Subject Name and Subject Code	Analog & Digital Electronics, 18CS33
Faculty Name	Hemalatha K N
Semester	III
Name of the Innovative Teaching Methods used	Hands-On Session On “Tinker Card”

Short Description of the Innovative Teaching Activity.

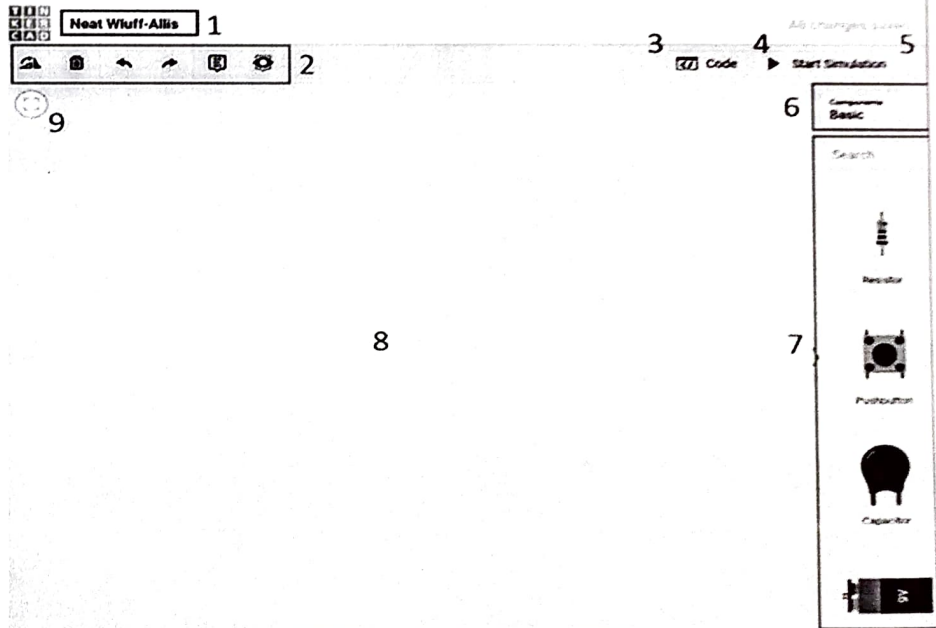
Tinkercad is a free online collection of software tools that help people all over the world think, create and make. Tinkercad already has a lot to offer as a design program, but it also serves as a replacement for Autodesk's discontinued "123D Circuits" service, which was a free and easy to use breadboard simulator. This article will introduce you to the basics of Tinkercad Circuits which, like [Fritzing](#), is a great design resource for makers.

Getting Started

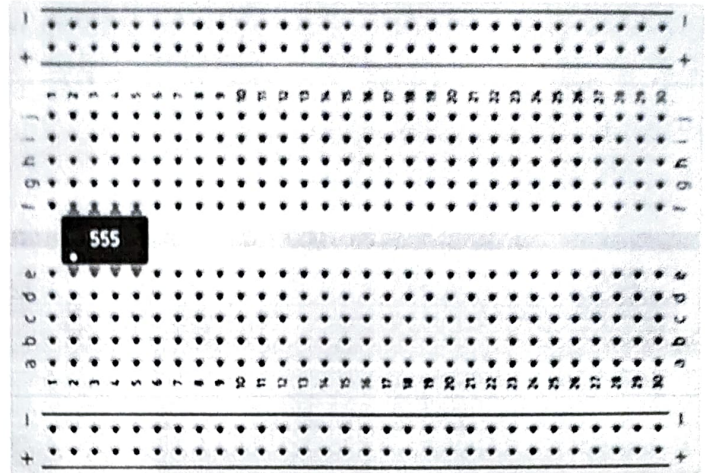
To get started, visit [Tinkercad's website](#) and create an account or log into an existing one. Then select "Circuits" on the left side of the screen:



Select "Create new Circuit" on the next page and you'll be greeted with the following screen:



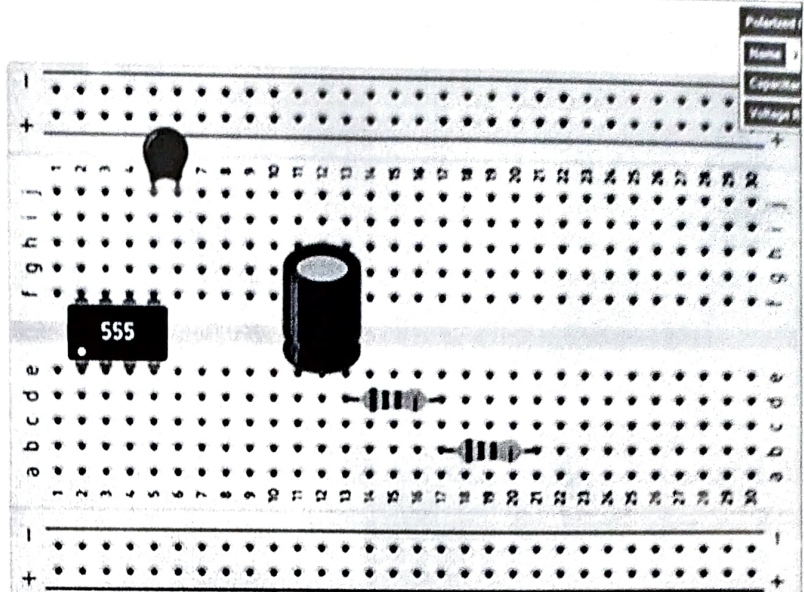
Start by dragging a breadboard into your design and place a 555-timer IC on it:



Proceed by adding the other components including:

- Two 1K resistors
- One 0.01 micro Farad capacitor
- One polarized capacitor with a capacitance of 1 microFarad

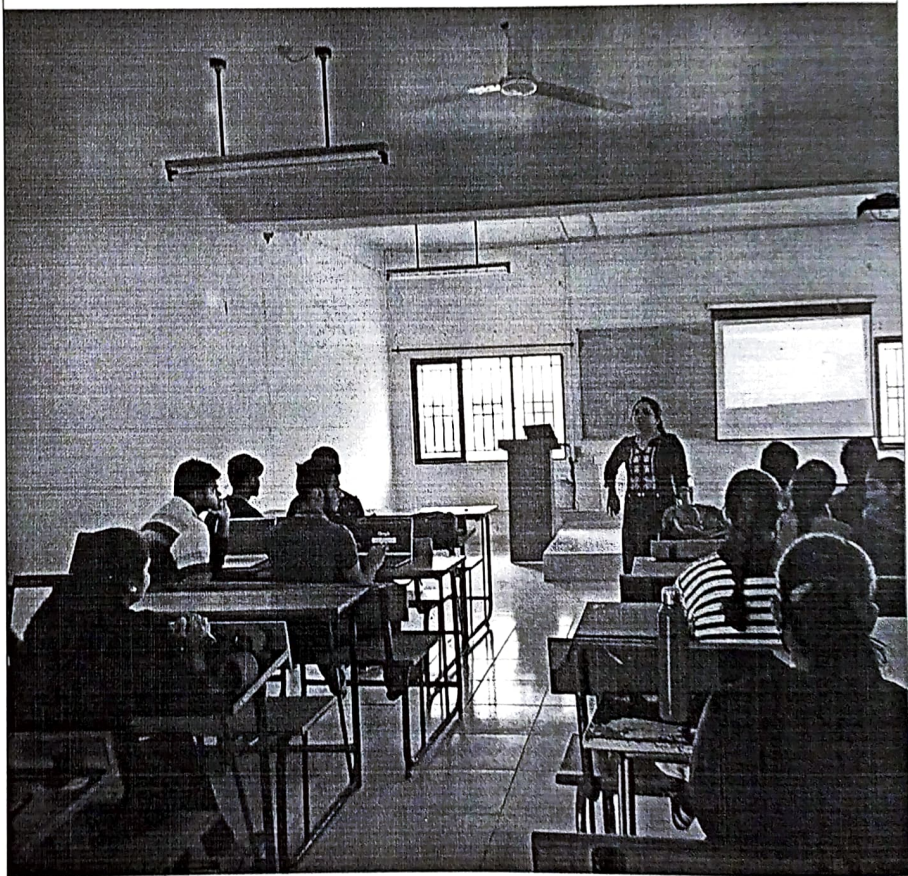
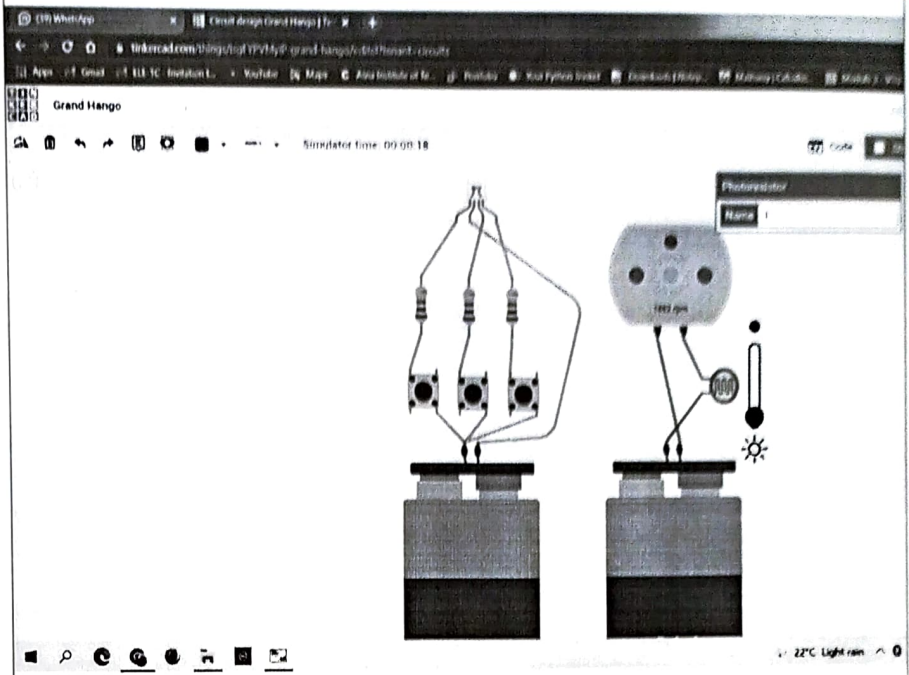
You can enter the values of each part after placing them or by clicking on a part:

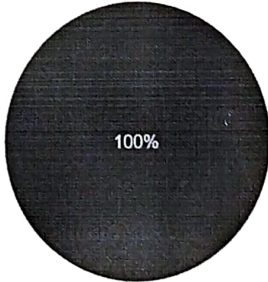



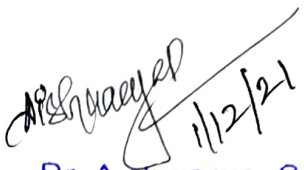
Number of students got benefited. 40

Number of students involved in the activity.	40
Venue of the Activity	AC406 Classroom
Date of the Event	20 th November, 2021
Whether the work can be Reproduced and Reviewed.	YES
Details are available in the college website.	YES

Photograph for the event



Contents of the Event	Students simulated the circuits using tinker cad tool and explored the practical working of theoretical circuits
Impact Analysis after using this Innovative Teaching Methods used.	Student's interest has been increased in designing the circuit in a different practical way
Feedback from the students	<p> What made the session interesting 21 responses The software was fun. Circuits building Learning new things beyond the curriculum Building circuits Learning new things apart from regular classes Getting knowledge about such an interesting platform like tinkercad and applying d concepts in that made it more interesting Learning to create circuits using software Learning the connection of the circuits Learnt much things out of syllabus It was quite interesting </p> <p> Is the session included the topic which is 21 responses </p> <div style="text-align: right;"> <ul style="list-style-type: none"> ● In the curriculum ● Beyond the curriculum </div> <div style="text-align: center; margin-top: 20px;">  <p>100%</p> </div>
Relevance to PO and PSO	PO3,PO5,PO9,PO10
Any comments or Suggestions from the Programme Co-ordinator	The content should be readily made in college website

Signature of the Faculty	Signature of the HOD
 (Hemalatha K.N.)	 Dr. Aishwarya P Professor & Head CSE Atria Institute of Technology Bangalore - 560 024