# Warm up:

Hi my name is Diksha, I am from Rajasthan India., my hobbies are Playing tennis and swimming.... And I'm going to be your coding teacher for this class today.

What is your good name?

Which grade are you in?

Where are you from, which country?

<Reply: I know xyz from the same country....school...another student...>

That's really great

May I know about your hobbies?

<Student reply>

Awesome....

Thank you so much for giving your introduction

Do you have any idea what we are going to do in this class????

<Student - No idea>

Before starting

LETS PLAY A GAME Together...

Are you ready for that...

<Yes>

Great...

So in this game, you have to follow what Diksha Says....For example If Diksha says stand up, so you have to act accordingly...

Ok..

Diksha says close your eyes..

Diksha Says raise your left hand

Diksha says Clap...

Very well done..Keep this spirit up..

:You know In today's class we will be learning about coding , also about the platform that we are going to use for creating the project, we will be learning about some important concepts of coding after which we will have a small quiz based on what we learnt in the class, after which I will be having a word with your parents regarding some things related to today's class and also about further more details related to the importance of coding etc.

Before we dive deep into it, Please let me know if you Have ever heard about Coding Before? Do you know what coding is?

#### <Student answers>

If you remember the previous fun activity that we just played, you were able to perform the actions because there was a common language to communicate that's is English in our case because we both understand English..

Similarly if you want to convey your message to a computer, you should communicate with its language. And coding is the study of that language in which we can communicate with a computer.

I hope that Is clear to you now?

<yes>

Have you heard of Scratch before?

#### <no>

SCRATCH is a visual programming language using which we can create fun games, stories or animations

today we will learn together how to make a project using the Scratch platform.

I will be sharing my screen with you.. Please acknowledge if that is visible?

On the left we can see the colourful circles .....each colour has its own particular function, inside them are the readymade codes or instructions with which we can play around.... this is called as the BLOCK PALETTE

Next the empty blank space in the middle is THE SCRIPT AREA (Annotate),

this is where we are going to drag these code blocks... meaning we are going to drag and drop these blocks/instructions from the block palette so that we can request computer to perform some tasks.. ok

Lets come to the Stage .. do u know what a stage means? Tell me what happens on the stage?

### <Student ans>

THE STAGE is where the program takes place right?

That means here we can see how computer is performing according to the code blocks provided...this is where the entire program/game/story that

you create is going to play.

Now lets discuss about the

### **BACK**Drop

-

Its just like a background for your project...

Because what do we need in a story?

A beautiful background as well as a character Right?

It can be An animal, a human, an alien or even a robot.

So the characters are very important in a story and on Scratch the characters are called as SPRITES

Now lets use all these stuff together and create a beautiful Game that's is pop the balloon..

So to create this project, what do think would be the backdrop????

You can add anything of your choice....

So lets see what options are provided by the scratch.. When you select the search button, It shows you all the sprites exampes provided...you can choose any of them ....and if you are good into drawing, you can even draw on your own and use it....also if you have an image available in your computer, you can upload them here.....

As of now, lets search for any backdrop from the available options...can you see at the top there are specific categories are mentioned so that we can ease the search...

Which one would you like me choose????

Ok here we go...and now we have this wonderful backdrop available...

Now its time to add a baloon here...or anything which you want to spawn....

I will add the one and then I want you to replicate it ... ok...

#### Great..

Over here at the bottom, you can see this cat icon, if we click we have some options as we can choose the sprites from scratch library and also if you want to upload it from your computer, you can include it,

Lets check whats available in the scratch ... now you can see some options are given , which one you like the most??

Ok let me choose it then....

After selecting it, can you see its available in the stage.... When you move the sprite with your mouse cursor, it will show you its positional parameters,

What do we mean by that??

Lets understand about coordinates with the help of a

backdrop...

Let me include a backdrop..

With the help of this, you will get a clear idea about x and y coordinate values..

This middle point is the point of reference to measure the position..it is called as origin...here we have to initialise x and y value as 0,

When we move towards right, then there is an increase in x value but y value remains same,

And when we move leftwards, x value decreases but y value still remains 0...

So x is the measure of left right movement....

And in the same way if we move upwards, y value increases but there is no effect on x value..

When we move downwards, y value decreases,,.
The maximum values are provided at the extreme ends as you can see..

I hope that is now clear to you...

Now lets talk about this balloon sprite ... it has several properties which you can see in the costume section provided on the top left side..

You can modify the looks of the sprite from this section...

Lets choose this Balloon as of now and come back to code....

Now in the Script part, whatever blocks you include, those act as a command for a particular sprite, since we selected balloon sprite that's why all these code blocks can be included to write instructions for a balloon..

We need to tell computer that please locate the balloon to a specific position initially when the green flag is clicked Lets include this event in the script area....

In this game, we have to show a score as well so that we can increase the score on popping of a balloon...

So to show the score, we will so to the variable section where we can create our own variable and set its value....

Variables are just like an empty container where you can store anything, in our case we are going to store a number and as the name is variable that means we have a facility to change its contents...

Lets name it as score and you can write any name here, Lets give the initial value as 0 and you can see this variable along with its value at the top left corner of stage...

Lets include a block to initialise this variable value as 0...

Now we want balloon to spawn randomly on the stage, So lets search for a block inside motion block and can you see something "go to random position???? Lets include it in the code...

And when we check the output, then everytime you need to click on the flag to change the position of the balloon... Its better to instruct computer to do this repeatedly ... We want to control this action, that's why inside control block you can see "Forever "block which will help to do a specific task repeatedly.....

Now the change is very fast...to control the movement, we can include a wait block so that before changing the next position, we want computer to rest for some seconds,,,

So lets include wait for 1 sec inside forever block and here we go....

We are able to spawn it properly,,

Now I want you to complete this game ..Are you able to add some instructions on your own now to pop the balloon once it is clicked...

Great, please share your screen then, don't worry I will be guiding you through it ....

Now lets go to the control section ans search for any instruction which says when this sprite is clicked,,

So whenever we click on the balloon , we want to increase the score by 1...

So its is related with the change in variable..so lets search something inside variables section...

" change the score by 1 "

Lets include it after the sprite is clicked...

Good job...

Our game is almost complete but adding sound will make this game more interesting...

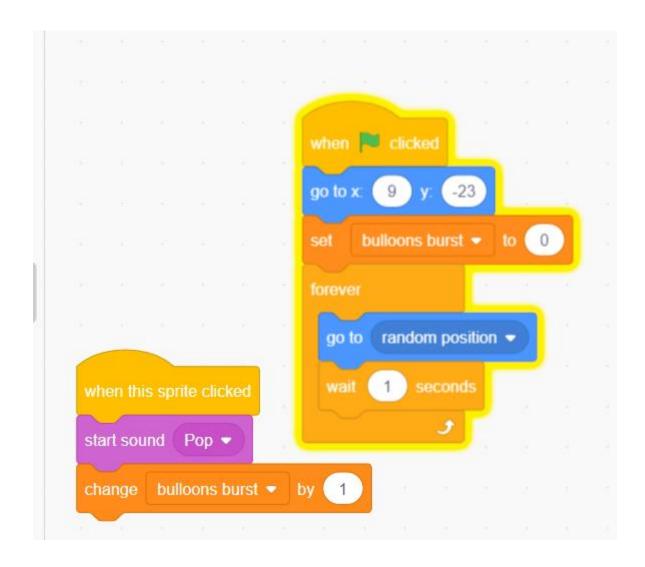
Lets go to the sounds section which is at the top left corner...

Can you see a speaker icon at the bottom,

Please choose your own sound file ...

Now come back to the code section and search something inside sounds....

We have an option to "start the sound" using the dropdown, you can select your sound file..



Please click on the green flag and lets check its working...

Hurray ..its perfect...

## **Project Completion..**

Congratulations on completing your first project. Did you like the project you made?

#### Great

Do you have any doubts about the project?

You know

You completed the project in just 20 minutes, not everyone can do that. So Very well done.

What if we share this achievement of yours with your parents?? Is anybody around you..??

Please request them to join us

. Ask the student to call the parents on the screen.

Hello ma'am/sir, How are you today?

My name is \*Diksha\*'I am from Brightchamps and I was the coding educator for \*<Bhupi>\* for this session.

Hey <br/>bhupi>\* Can you please show the project to your parents? They will

be very proud seeing your new achievement

Mam/sir I must say <a href="https://www.sir.lines.com/sir.

May I know How did you come across Brightchamps? What are you expecting out of this course?

#### <Parent ans>

Sounds good....

Let me tell you that you have taken a right step forward..

It's great to see you being so aware of the present need of coding in learning. As We all are surrounded by technology/coding everywhere. Learning Coding will definitely make <Bhupi> to stand way ahead of his/her peers.Because his/her logical thinking, problem solving approach will improve day by day and this is the right age to get started with coding.

We give him/her hands on experience as you must have seen in today's class... and they are going to drive the classes which makes them a good leader..

Mam/Sir,

if you have any questions regarding BrightChamps, our courses, curriculum, what kind of technologies we teach,

Also if you want to know about the enrollment process and fees structure as well, I can call an academic counsellor on the screen if you permit????

Shall I invite them here?

<Introduction about the parent>

Hi (Rahul) Thank you for joining us
. We have (Mrs .Anju) with us today who is the parent of Bhupi) ,,,

Let me tell you that Bhupi is currently studying in (6th GRADE). And We have just completed the (fish aquarium ACTIVITY) on (scratch) . and it was a great class, I am happy to let you know Bhupi is a smart kid and completed the activity really quickly and he/she has good understanding of the subject matter.... Mrs Anju) is keen to know more about our program and fee structure. I request you to kindly guide him/her with the enrolment process with us.

## (Introduce AC to the parent >

Mrs. Anju), Let me introduce you to (Mr.Rahul), he is a Senior Academic Counsellor with us who will guide you further giving the enrolment details and ensuring all your concerns are taken care so that you can decide accordingly.

I thank you for giving your valuable time, ,
Also I assure you to have the best learning experience and
I am looking forward to see Bhupi in my upcoming classes so that we can continue this beautiful journey of learning together.....

I will take your leave now and over to you Rahul

Bye Take care