



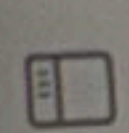
Prize Winner

Programming, Apps & Robotics Year R-2

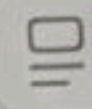
Danvi Arun

**Bellevue Heights Primary
School**

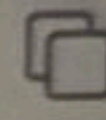
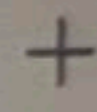
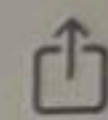
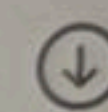




Personal



scratch.mit.edu



growaplantusingscratch on Scratch

Grow a plant using Scratch - YouTube

Scratch

Settings

File

Edit

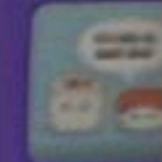
gr...

Shared

See Project Page

Tutorials

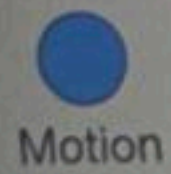
Debug



Code

Costumes

Sounds



Motion

Motion

move 10 steps

Looks

turn 15 degrees

Sound

turn 15 degrees

Events

go to random position

Control

go to x: 0 y: -81

Sensing

glide 1 secs to random position

Operators

glide 1 secs to x: 0 y: -81

Variables

My Blocks

point in direction 90

when clicked
switch backdrop to Forest
switch costume to pot
play sound recording1me until done

when a key pressed
switch costume to pot with soil
play sound recording1soil until done

when b key pressed
switch costume to pot with seed
play sound recording1seeds until done

when c key pressed
switch costume to pot with earthworms
play sound recording1worm until done

when d key pressed
switch costume to pot with roots
play sound recording1water until done

when e key pressed
switch costume to pot with flower
say great! job you grew my plant with tulips
switch backdrop to pathway-2289978_1280



Grow a plant using scratch

Danvi Arun

Year 1 Bellevue heights primary school



Sprite pot

x

y

-81



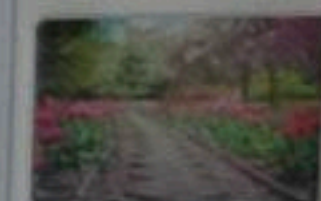
Size

50

Direction

90

Stage



Backdrops

2

MacBook Air

REPORT- GROW A PLANT USING SCRATCH

INTRODUCTION

Aim of the entry

We aim to show that science is fun by using scratch to grow a plant. My game in scratch also helps us teach how we can grow a plant using soil, seeds, earthworm, water, and sunlight.

Scientific purpose

In my school I learned about living and nonliving things. I learned that plants are living things like us. Plants grow from seeds by eating good things from soil, drinking water, use leaves to get rainwater and energy from sunlight. Earthworms make soil good and strong for plants from green waste materials.

Potential applications

My Scratch game about growing a plant can be used by teachers, and other children to learn the science behind growing a plant. It can also be used as a fun game by children to play during break times. Teachers can show their students how to use scratch, so they can make their own scientific games and videos.

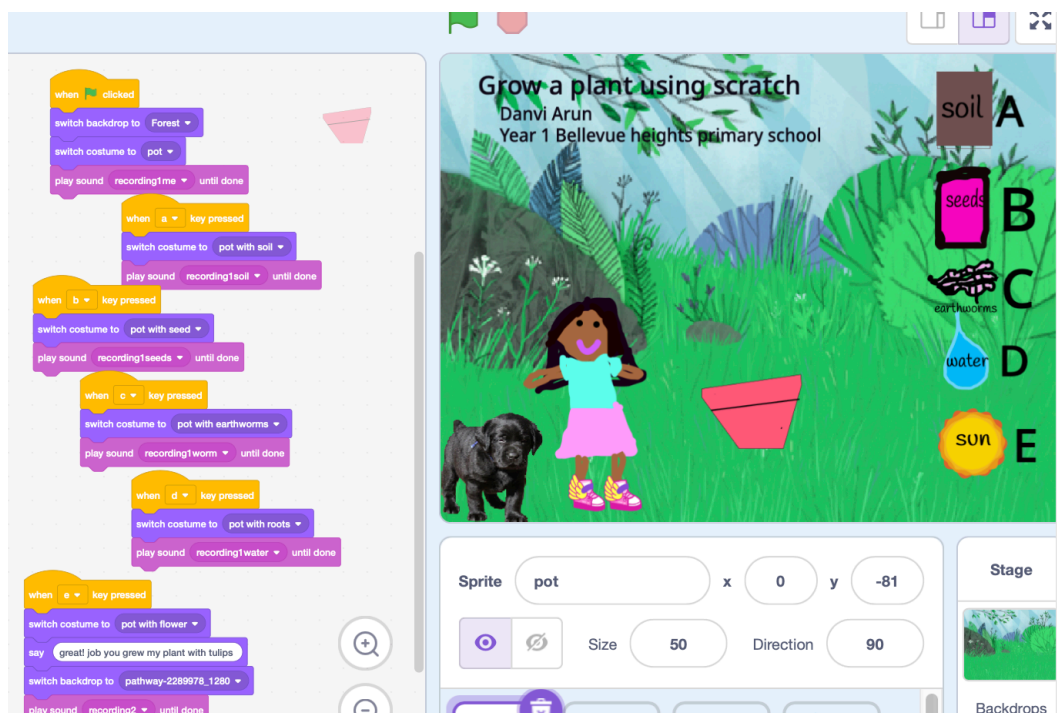
TYPE OF COMPUTER/DEVICE REQUIRED TO RUN THE PROGRAMS

Scratch can be used on any device that has internet like iPads, phones, computers, and laptops. It can also be used to make videos for fun and can be added on Youtube for others to learn.

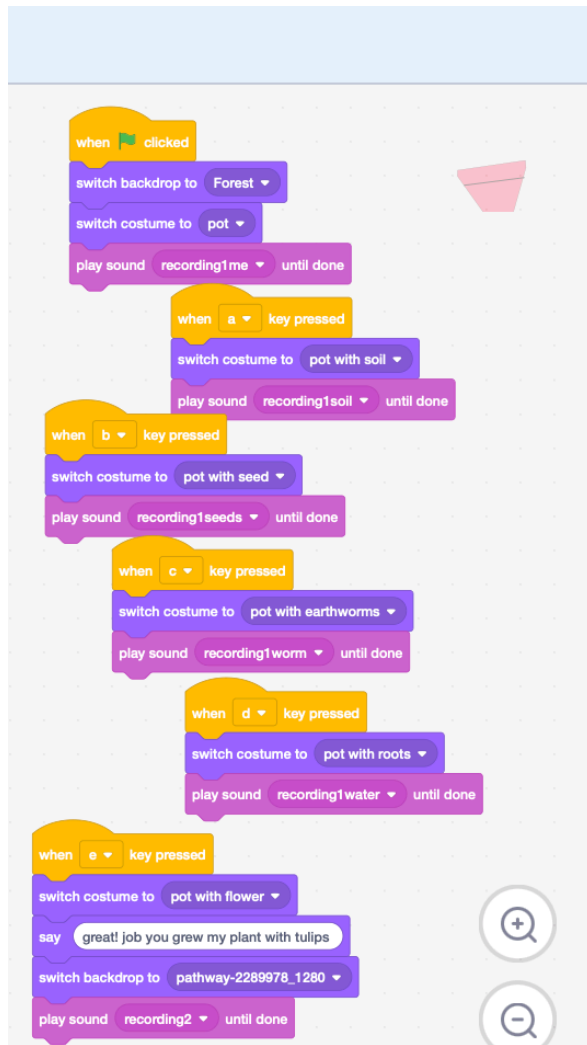
INSTRUCTIONS ON LOADING OR USING THE ENTRY

To open Scratch, go on Google and search Scratch or go to the website <https://scratch.mit.edu/>. To open my game, go to google and add <https://scratch.mit.edu/projects/1183959462> and click enter.

HARD COPY OF THE PROGRAM



My game



My Game

EXPLANATION OF WHAT THE SECTIONS OF THE PROGRAM DO

I first drew how I want my game page to look like, and then made the game on Scratch.

I made different characters such as me, my dog, my pot, soil, seeds pack, water, earthworms, and my sun. I wanted my pot to look different while using ingredients, and I drew 6 drawings of my pot using costumes.

I wanted to use my keyboard to play the game, and you must press the keys on the keyboard A, B, C, D and E to add soils, seeds, worms, water, and sunlight.

When the flag is clicked, I will talk welcoming you to the game, and telling you what to do in the game. It also changed the backdrop to Forest.

At the end, it will say great job, and change the backdrop to a pathway with tulips.

When you press A on the keyboard- my character will talk saying what you added, and my pot costume will be filled with soil.

When you press B on the keyboard- my character will say You added the seeds, and my pot costume will fill up with teal coloured seeds.

When you press C on the keyboard- my character will say Well done, you added wiggly worms, and my pot costume will have earthworms.

When you press D on the keyboard- my character will say Well done for adding water..., and my pot costume will have little roots with leaves.

When you press E on the keyboard- my character will say 'Thank you for playing my game, and for growing my plant with tulips', and my pot costume will show a fully grown tulip plant. The background will also change to pathway with tulips.

ACKNOWLEDGMENT OF ANY EXTERNAL SUPPORT PROVIDED TO THE ENTRY

My mum helped me spell some words in this report, to rename game, to find a background with tulips from pixabay to avoid copying from internet. My mum also helped me add headings to this report for me to fill later, and explained meaning of headings for me to answer.

My mum helped me record the video and send it to Mr. Nicholson.

My mum took screenshots of hardcopy of program for this report.

My mum taught me how to use autocorrect and tab button to fill words.

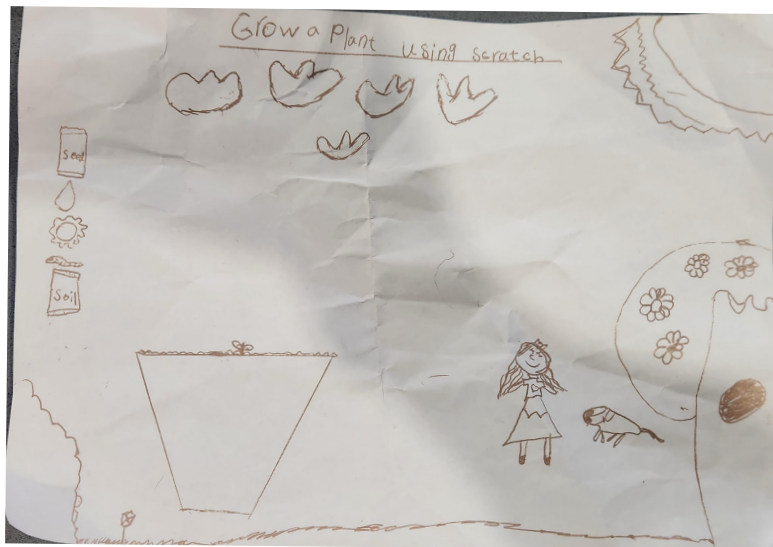
BIBLIOGRAPHY THAT ACKNOWLEDGES RELEVANT SOURCES OF INFORMATION

Scratch- www.scratch.mit.edu

Pathway with tulips from <https://pixabay.com/>

Project checklist from https://www.oliphantscienceawards.com.au/files/7616_osa25_information_booklet_par_checklist.pdf

Drawing I did to make the game:



Youtube video link showing the game:

