# Module 10 Scratch Project

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#### Introduction

You will create a Scratch project in this module. You will follow the MIT Media Lab creative thinking spiral model that was introduced in Module 8. This design process is outlined below.



### What do I need to include?

Your Scratch project will include the following:

- At least 2 sprites
- More than 1 background
- Iteration (repeat loops)
- Conditional statements (if....)
- At least 1 sound
- At least 1 variable



You will be provided with a checklist to help you confirm that you have included all the above criteria in your project.

The following graphs should inspire you with ideas for your project. You can also check out the Scratch National Finals projects for inspiration at http://scratch.mit.edu/galleries/view/83422 or just visit the projects area of the scratch website at http://scratch.mit.edu/latest/shared





#### Brainstorm

Think of as many ideas as possible for your project. Write down all ideas and suggestions. You may work on your project alone or as part of a team.

Student Name(s):	
	 $\langle$
	ζ
Project title:	



Brainstorm ideas (write words or draw pictures on anything relating to your project):



### **Scratch Project Notes**

Once you have decided on a final idea, write a brief project description in the project notes section of Scratch. The following image illustrates how to access the project notes section of Scratch.



## Create

Now it is time to design and create the project from the ideas in the brainstorm.

## Project Design

Use your brainstorming to describe all sprites used in your project.	
Use your brainstorming to describe all backgrounds used in your project.	
Describe the sounds used in your project.	
What are the instructions for operating your project?	
Describe the following phases of your project:	
<u>Start</u> :	
<u>Middle</u> :	
<u>Finish</u> :	
What variables are used for your project?	

**Diary of work**. If you are working as a team you can acknowledge tasks completed by individuals. Place the initials of the group member(s) who are responsible for completing a task in brackets beside that task. (**To be filled in and handed up at the end of each day of work**)

Date	Work Completed

Date	Group Member 1 Work Done	Group Member 2 Work Done	Group Member 3 Work Done

As part of the project design process you will need to debug your project. This means that you must test the different parts of your project to make sure it is working correctly. You will be familiar with the test suite idea from Module 9 when you created an advanced game in Scratch.

Test Case	Peer Check	Teacher Check
At least 2 sprites exist		
More than 1 background included		
Repeat loops included		
At least 1 'if' statement included		
At least 1 sound included		
At least 1 variable included		

#### How to Share Your Sprites

If you are working as part of a team it is useful to know how to share sprites. Sprites can be exported and imported into different Scratch files.

1. Right click on the sprite you wish to export and choose 'export this sprite' from the list, as shown.



2. Choose a location on your computer where you wish to export the sprite. The sprite will then be exported, together with its script.

Export Sprite		
Computer	Costumes 💽 🔉 🖆	
	1. Choose the location on your computer to where you wish to export your sprite for another member of your project team to	
Desktop	access e.g. a shared drive on your computer or a memory stick.	
2.	Choose a filename for the sprite you wish to export and then click OK. New Filename: hungry fish DK Cancel	

3. To import the sprite into another Scratch project, open the project and click on the 'choose a new sprite from file' button, as shown. Find the sprite by selecting the location to which you had exported it from the previous project.

🗃 🐴 File Edit Share Help		
	New Sprite	
at Computer	• £ 🖸	e green flag. he mouse to eat all fish
Desktop C:	D: T:	
		WE Y
2. Find the sprite by	UK Lancel	VI-308 UI-352
on your computer to	New sprite: 🔗 🚖 🏠	
where you exported the sprite in the first place.	1. To import the sprite you expor into another Scratch file (e.g. th one your teammate is working o	rted ne on),
	file button as shown.	om

4. Once you have located the sprite, select it and click OK. This will import the sprite, together with its script, into the current project, where it will appear in the sprite list area.

Computer	My Documents	<u>ک</u> د 💽
Costumes	My Music	My Picture My Picture
	Scripts 2 hungry fish	sprite list area.

#### **Using a Scratch Account**

1. Open the Scratch homepage at http://scratch.mit.edu/ then click on the signup link at the top of the page as shown below in the following image.



2. Enter your details to set up an account as follows:

ScRATcH	home projects galleries support Enter a username here. It must
imagine • program • share	Login or Signup for an account there is no need to enter your ful
Create an account	name.
Username*	Enter your password here. It should have at least 6 characte
Password*	
Confirm Password*	•••••
Birth date*	April V 1993 V
Email*	mp24@hotmail.com here. This is necessary to recover a lost password.
Gender*	male
Country*	Ireland
State/Province	
City	Click on sign up once you have completed the details above.
	Privacy Policy   Terms of Use   Contact Us

It may be useful to note your username and password in the spaces as you will need them each time you login to your account on the Scratch website.

Username:	

Password:

3. Once you have clicked sign up, the following welcome page will appear.

SCRATCH imagine • program • share	home projects galleries support forums about my stuf Welcome, marty10   Logout	f Languag 🗸
marty10	My Projects Learn how to share your projects!	ber to logout are finished.
change picture change password	My Favorites remove selected favorites	Showing:
Comment List You have 0 comments View Comment List	1. This is the welcome page which appears when you set up	
Ignore List You have 0 users on your ignore list	page your account has been successfully set up.	
No friends yet.		
Galleries		
You have not created any Galleries. Do you want to <u>browse</u> or <u>create</u> a gallery?		
See more		
	Privacy Policy   Terms of Use   Contact Us	

4. The following images show how students can upload their projects to their account on the Scratch website.



The following screen appears as your project is being uploaded.



Once your project has been successfully uploaded to your account, the following screen appears.



- 5. Once the project has been uploaded, you can view the project by logging in, using your username and password, on the Scratch homepage. Your project should appear on your welcome page, this makes it easy to view and download your project from any computer that is connected to the internet.
- **N.B.** Each time you are uploading an edited version of their project to your Scratch account, you should enter a new project name for the new version e.g. 'cat version2'. This will mean that you will have a number of versions of the project stored in your account on the Scratch website.

## Sharing Projects with the Irish Scratch Club

- 1. Open your Internet browser and to open the Irish Scratch Club gallery page by typing in the following address: www.tinyurl.com/irishscratchclub.
- 2. Log in to your own account from the Irish Scratch Club gallery. The following image explains how to do this. Alternatively you can just search for the Irish Scratch Club once you have logged in to the Scratch website.



3. Once you are logged in, you can add your projects. The following images show how this can be done.







Software projects are not just about designing and writing of computer code. When new software is created it is presented to the users of the software to introduce the features of the project and to gain insight from users about further developments that could be introduced in the future. We will outline how to make an effective presentation of your Scratch project to people who will use the software. Before making your presentation it is important to evaluate the work that has taken place and to notice what has been learned during the process of creating the project.

## **Evaluation of the project:**

1.	Challenges	faced /	Negative	aspects
----	------------	---------	----------	---------

2. Things enjoyed / Positive aspects

#### Presentation

You will make a presentation of your Scratch project. Let's review some of the tips for making a good presentation that were covered in module 8.

#### **Practising your Presentation**

- Practise your presentation with a friend beforehand.
- Don't memorize your text.
- Think about your key ideas and your words will follow naturally.

#### **Your Big Moment**

- Use your opening to catch the interest of your audience.
- Briefly introduce the topic you will present.
- Describe or outline the main ideas for your presentation.

#### **When Speaking**

- Keep your eyes on the audience.
- Don't turn your back on your audience.
- Be enthusiastic and maintain good posture.
- Speak clearly and project your voice.
- Pause briefly before each new topic.

#### **To finish**

- In your conclusion, summarize the main ideas of your presentation.
- Mention challenges / positive aspects of the project.

#### **Answering Questions**

- Leave time for questions at the end.
- Relax... having done your research you should be able to answer most questions.
- If you can't answer a question, say you will try to find the answer.



Fill in the plan below to help structure the presentation. Don't forget to use initials to allocate responsibility if you are working in a group.

Introduction	
Diary of Work	
Description of Project	
Testing – problems / solutions	
Challenges faced /Things enjoyed	
Challenges faced / Things enjoyed	
Challenges faced / Things enjoyed	
Challenges faced / Things enjoyed	
Challenges faced / Things enjoyed	
Challenges faced / Things enjoyed	
Challenges faced / Things enjoyed	
Challenges faced / Things enjoyed	
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Challenges faced / Things enjoyed	
Challenges faced / Things enjoyed	
Challenges faced / Things enjoyed	
Challenges faced / Things enjoyed	
Challenges faced / Things enjoyed	
Challenges faced / Things enjoyed	
Challenges faced / Things enjoyed	
Challenges faced / Things enjoyed	
Challenges faced / Things enjoyed Conclusion	

Taking the class feedback into account and your group's evaluation of the project, suggest 2 improvements for your project.

## Suggested Improvements for the Project

1.			
	 · · · · · · · · · · · · · · · · · · ·	 	
2.			
	 		· · · · · · · · · · · · · · · · · · ·

• Which one of the following is a computer simulation?

- A. A cartoon accompanied with music
- B. A car racing game
- C. A model that predicts how a category 5 storm will impact the west coast of Ireland
- D. A puzzle that is solved by finding hidden clues

2 Which one of the following blocks is a conditional statement?



An area on the http://scratch.mit.edu website used for sharing of projects amongst a community is known as

- A. A gallery
- B. An account
- C. A project area
- D. A forum

When you wish to move a sprite from one project to a different project stored on a different computer the first step you should take is.

- A. Duplicate Sprite
- B. Import Sprite
- C. Export Sprite
- D. Import project

Scratch Process of Design model (Page 2)

http://info.scratch.mit.edu/sites/infoscratch.media.mit.edu/docs/Learning-with-Scratch.pdf