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## I. Planning

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Before starting to record your podcast, you should plan the content of the podcast first, and then you can be a lot more efficient when it comes to recording. The first thing you need to do is think about the type of podcast you are making. What is its purpose? Who will listen to it? What information needs to be in it? How long should it be? All of these are questions that you should be asking yourself before you even start to think about recording. The other part of planning is organising what equipment you will need, depending on the situation, you will need different pieces of equipment and you may need to book it so that you can record your podcast.

### A. Planning your podcast

Before you even script your podcast you will need to plan it. The easiest way to do this is to quickly make note of details about the podcast, and then from these notes you will be able to write a good script that you can then later record. Here is an example of the kinds of things you will need to consider:

- Subject: Which school subject is this podcast going to be made for? Biology? Maths? English? Maybe the podcast isn't going to be made for a specific school subject; it might be News, or Youth Theatre details.
- Topic: Which part of that subject is the podcast being made for specifically? If it's Biology maybe its Genetics, if its Maths maybe its Division, if its English maybe its Grammar and so on.
- Audience Type: Is the podcast being made for students? Or is it teachers? Or maybe even people outside of school? The audience might even be just one person.
- Audience Age: What age group is the podcast being made for? Is it Year 9, GCSE, Sixth Form?
- Approximate total length: How long should the podcast be? Should there be a limit on how long it should be?
- Speakers: Who will you actually be recording for the podcast before you edit it?
- Deadline: When does the podcast have to be finished by?
- Sub-topics, Time allocated and Speaker
  - Sub-topics: What logical sections will you need to split main topic into? If its 'Simple Maths' as a topic, splitting this down into the sub-topics 'Addition', 'Subtraction', 'Multiplication' and 'Division'
  - Time allocated: How long should the section of the podcast dedicated to this sub-topic be?
  - Speaker: Who will you be recording for this section of the podcast?
- Equipment required, where from and when will it be used?
  - Equipment required: hat will you need to record this podcast? See the 'Equipment' section.
  - Where from: Where can you get this equipment?
  - When will it be used: When do you plan on using it?

When planning, it is a good idea to go into as much detail as you can for each part, though remember that these are just notes, using a table (such as the one below) can help you keep all of your thoughts on the podcast clearly laid out.

Subject:		Topic:	
Audience Type:		Audience Age:	
Approximate total length:			
Speakers:		Deadline:	
Sub-topics:		Time allocated	Speaker
•			
•			
•			
Equipment Required:		Where from?	When will it be used?
•			
•			
•			

## B. Equipment required for recording and booking it

For every different subject and every different topic there will be different equipment that is suitable for making that recording. For example, different kinds of microphone will be required for different types of recording, as they will have different pros and cons. Some podcasts will require laptop computers for them to be recorded, while others in computer rooms, or with flexible room choice can simply use a desktop computer. Making sure you have the right equipment is important well before you start recording your podcast, and should be done in the planning stages. Here is a short guide on equipment that we have in school, advantages and disadvantages of the equipment and where you can book it in school.

Name of Equipment	Advantages	Disadvantages	Where do I book it?
Laptop computer	Laptops are portable, so you can record your podcast from anywhere.	Laptops run on batteries, so if you're going to be doing a lot of work on them, remember to charge them up.	
Desktop computer	Has access to all of the school programs, and also the e-mail service for after you've made your podcast. The computers in school are also always connected to the internet via broadband.	Can't be taken away from where they are, if you're going to be doing a recording somewhere there isn't a desktop, you will need a laptop.	In school there are computers in the following rooms: <ul style="list-style-type: none"> <li>• A11</li> <li>• BX3</li> <li>• B5</li> <li>• C9</li> <li>• D20</li> <li>• D21</li> <li>• E11</li> <li>• E19</li> <li>• The Learning Resource Centre</li> <li>• The Design Technology Block</li> </ul>
Regular Microphone			You can book both kinds of microphone from the Audio Visual lab, AX1.
Clip-on Microphone			You can book both kinds of microphone from the Audio Visual lab, AX1.
The Recording Studio			

## C. Writing a script for your podcast

Now that you have completed the planning document, you are ready to write the script for your podcast. Some podcasts however will not have scripts such as a class discussion recording, and some podcasts will only have half a script, if they are an interview with a teacher or person coming into school. Some podcasts however will benefit from having a loose or tight script. Loose scripts just have some basic notes on each the sub-topics, sometimes just a bullet pointed list. These kinds of scripts are good as they do not take a lot of time to make, however if the speaker is unsure what to say, there may be a lot of editing that needs doing. Tight scripts are scripts that are as close to, or are actually word-to-word of what is going to be said. These kinds of scripts need to be thought about before you write them. Use the planning sheet you created to make a good script for your podcast. Remember, you need to consider a lot of things when writing the script, especially the audience that the podcast is intended for. For example, the language that you will use will be very different for a Biology SAT Revision podcast to the kind of language you would use for a Biology A2 Revision podcast. If you are unsure about what kind of language/ tone is suitable for the intended audience, you may need to research this. Use the Internet, books and other resources (remember, other people are resources too) to help you to make the best podcast you can.

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## II. Recording and Editing Podcasts

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### A. Introduction

Many of us who want to create a podcast will not be able to have access to the school recording studio, which would naturally be the first choice. There is a way to make a professional recording whilst just using a standard school PC though, and it is a lot simpler as well. This program is called Audacity and to access it, go to 'Shortcuts' on the 'desktop', then open the 'ICT' folder and double click on 'Audacity'. Audacity is a great free program that has all of the features of costly counterparts. Another thing, you can use this program at home as well, simply find the free download on the internet. See the sub-headings below for a guide to using Audacity.

### B. Audacity Key

Please look at the attached document for a description of the Audacity window.

### C. Recording

To record in Audacity, you will need a microphone. There are many different types of microphone that you can use, most of the school computers actually have them attached. For more information on which microphones would suit your particular podcast, read the planning section.

Basically, it is quite easy to record into Audacity. Simply choose what input device you want to use from the **Input Device Selection**. When you click on this you will be shown a choice of Phono Line, Microphone, Line In, CD Player, Aux, Stereo Mix, Mono Mix. For your purposes you will probably need to select Microphone; this will allow you to record from a microphone. If you did want to use sound from a CD, it would be much easier to go to the **Project** toolbar, click **Import Audio** and follow the on-screen instructions.

Once you have selected your input device, you are ready to record. One tip to follow before you record is to quickly speak into the microphone at the volume you will be recording at whilst watching the **Input Level Meter**, if this meter goes right to the top of the scale, turn down the **Input Volume**. The maximum the **Input Level Meter** should show is about three quarters of the way up the scale. This will avoid any clipping and distortion.

To start the recording, simply press the **record** button. From then on, every chosen input into Audacity will be recorded.

### D. Editing

When you have finished recording, you will see that a track has been created which shows the sound wave you have made. First thing to do is listen to your track, is there any long silences or unwanted noises? Listen through again carefully and remember which parts you are not happy with. Now you can start to use the host of tools available to make your recording sound more professional. For a description of all the tools, see the glossary.

Below is a list of common problems that you may come across whilst making a podcast.

- There are clicks and crackles in my recording

When you can hear clicks and crackles in your recording, these will show up on the actual sound wave as large spikes. To get rid of these spikes, the easiest way is to use the **zoom tool** to zoom in on the spike, use the **select tool** to select the spike (by left clicking on one side of the spike and dragging the cursor to the other side before releasing the mouse button), and then press the **silence selection** button to silence the selected sound (i.e. the spike/crackle). You can also use the **draw tool** by zooming in until little dots start appearing on your sound wave, selecting the draw tool and then actually flattening out the spike by re-drawing the sound wave.

- There is a large gap at the start of my recording that I don't want

If there are parts in your track that you don't want, simply use the **select tool** to select these parts and then press **delete** on your keyboard. They will now have disappeared and your track will have joined the two parts around the selection. You can also use the **time-shift** tool to drag the whole track to the left, so the silence disappears behind the track information bar.

- Some parts of my recording are louder than others

This is a common problem if you were recording something that is not in a fixed position. From looking at the sound wave you should be able to see where some parts are quieter than others; the sound wave will appear thinner. To combat this, simply select the **envelope tool**. When clicked, a blue line will appear along your sound wave; this line represents the volume of your track and the higher the line, the louder the sound wave directly under it will play. Now find the parts that are quieter than others and move the line up so it is higher over the quiet parts and lower over the louder parts. This will make the recording sound more balanced.

- When I play my recording, the output meter shows red and the playback sounds distorted

If this happens, simply turn the **track volume** down until you do not see red anymore when you are playing your recording.

## E. Exporting Your Finished Recording

When you have finished editing your recording, you need to make an MP3 to upload onto the school website. When exporting, all of the work you have done will be made into a brand new sound wave. MP3 is always used for podcasting as it is the smallest sized audio file.

To Export your project, click **file**, and then click **Export as MP3**. You will then be prompted to choose a name for your file and a place for it to be saved. When this is specified, click save and you will have your very own MP3 file waiting to be uploaded.

## F. Glossary

Buttons and Windows contain explanations for the Audacity Key sheet attached, and Vocabulary contains explanations of common terms involved with working with sound.

### 1. Buttons

*Copy*- This copies whatever is selected and allows it to be pasted

*Cut*- This deletes whatever is selected but allows it to be pasted wherever the cursor is

*Draw Tool*-This allows you to draw on the sound wave when you are in a high zoom

*Envelope Tool*-This lets you set the volume to automatically change during playing

*Fit Project In Window*-This will fit the whole project in one window

*Fit Selection In Window*-This will make everything that is selected visible in one window

*Go To Beginning*-This moves the cursor to the beginning of the project

*Go To End*-This moves the cursor to the end of the project

*Input Device Selection*-This chooses what device is set as your input device

*Input Volume* –This sets how loud you want your input device to be

*Multi-Tool*-Lets multiple tools be selected at once depending on where the mouse is and what keys are pressed down on the keypad

*Output Volume*-This sets how loud you want anything to be when you play it back

*Paste*-This will add whatever has been copied and cut to the project wherever the cursor is

*Pause*-This pauses the project

*Play*-This starts playing the project

*Record*-This starts recording in a new track

*Redo*-This will redo anything you have undone

*Selection Tool*- This lets you select parts of a sound wave

*Silence Selection*-This will silence everything that is selected on a track

*Stop*-This stops the project and moves the cursor back to the beginning

*Time-Shift Tool*-This allows you to shift whole tracks left and right

*Track Panning*-This can adjust the balance between how much of a track is played out of the left and right speakers

*Track Remove*-This removes the track

*Track Volume*-This adjusts the volume of the track

*Trim Outside Selection*-This will silence anything in a track that is not selected

*Undo*-This will undo your last action

*Zoom In*-This zooms in towards the cursor

*Zoom Out*-This zooms out

*Zoom Tool*-This allows you to zoom in and out using the left and right mouse buttons

## **2. Windows**

*Input Level Meter*- This gives a scale of how loud the input into Audacity can go before clipping occurs

*Left Speaker Sound Wave*- This is a picture of the left speaker sound wave

*Output Level Meter*- This gives a scale of how loud the output of Audacity can go before distortion occurs

*Position*-This is where the cursor is and is where the computer is reading the project

*Right Speaker Sound Wave*- This is a picture of the right speaker sound wave

*Time Line*-This is a scale in seconds to judge how long sound waves are

*Track Info*-This shows the Quality of the recording and whether the recording is in mono or stereo, there is also mute and solo buttons that enable you to mute and solo the track

*Track Level Meter Scale*- This gives a scale of how loud a track can go before clipping occurs

*Track Name*-This shows the name of the track, clicking it enables you to rename the track

## **3. Vocabulary**

*Bit*- This refers to the quality of a sound wave, the higher the bit, the better the quality. 16 bit is the lowest quality that Audacity plays and 32 is the highest. A bit rate is always divisible by 8.

*Clipping* – This happens when an input is too high to fit within the input level meter/track level meter scale. Because the sound wave cannot fit, the computer clips the bits of the sound wave that are not able to fit resulting in a damaged sound wave

*Distortion*-This happens as a result of clipping but also happens if a volume is too high. It makes the playback sound damaged

*Dithering*- This is what happens when a high quality bit rate is turned into a smaller lower quality one. It is a process of adding a small amount of noise to a sound wave which actually makes the quality sound better.

*Hz*-This refers to (*something*)/second; it can mean how many samples a sound wave plays a second, e.g. a CD plays 44000Hz (44000 samples a second, or a bass guitar has a frequency of 100Hz (its sound wave oscillates 100Hz per second)

*Mono*-This is a single sound wave that is played through both speakers

*Mute*- This stops a track from playing

*Panning*-This refers to the balance of a track coming through the left and right speakers

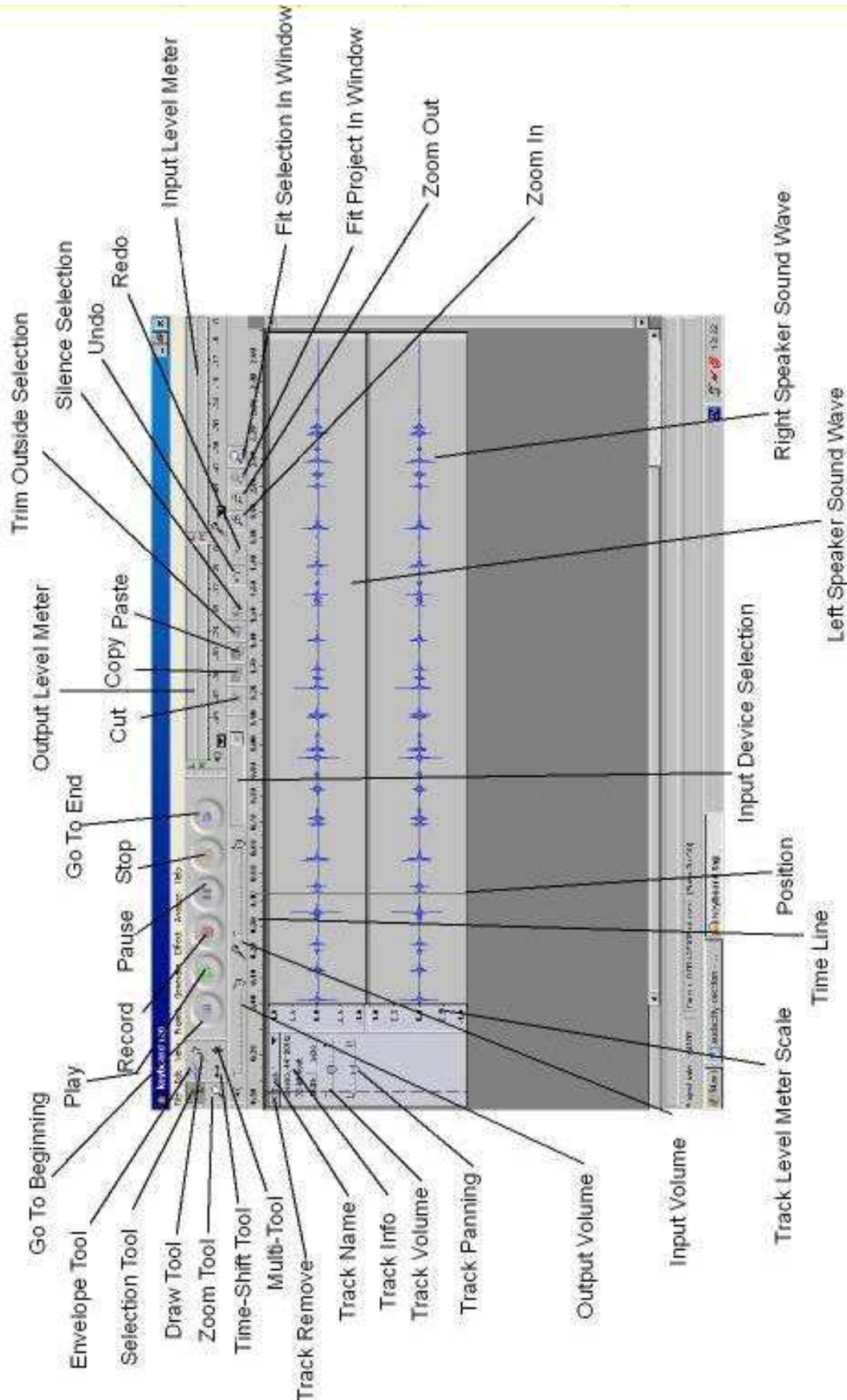
*Project*-This refers to the collection of tracks

*Solo*-This makes a track play on its own

*Stereo*- This refers to two sound waves of the same recording which are played through two different speakers to give a more 3-d sound

*Track*-This is where one sound wave is kept in the project

# Audacity Key



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### III. Id3 Tagging

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Id3 tags hold information about sound files. Things such as: What they are called, what they are about, and who made them. These are then used to allow people to find what they are looking for. This sheet will give you a quick guide on how to give your sound file some ID3 tags and what information should be in them.

Putting Id3 tags on mp3 files is easier than it sounds. Here is how you do it.

#### A. ID3 Tagging Using Audacity:

If you are using the program Audacity to edit your sound file then follow these steps (if you are not consult the Windows Explorer section).

1. Once you have finished editing your sound file first save it as shown in fig.1.

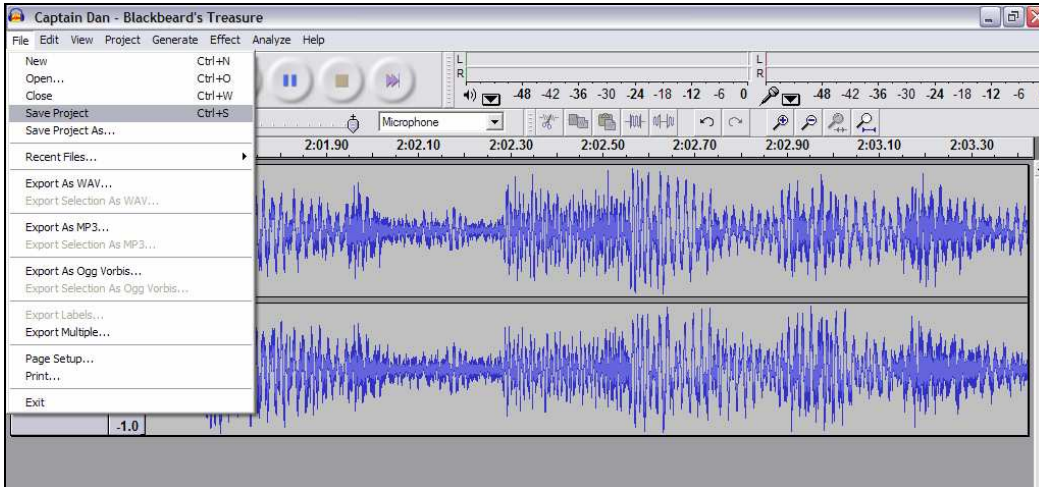


fig.1

2. Then click on the 'Project' tab at the top of the screen and press 'Edit ID3 tags' as shown in fig.2.

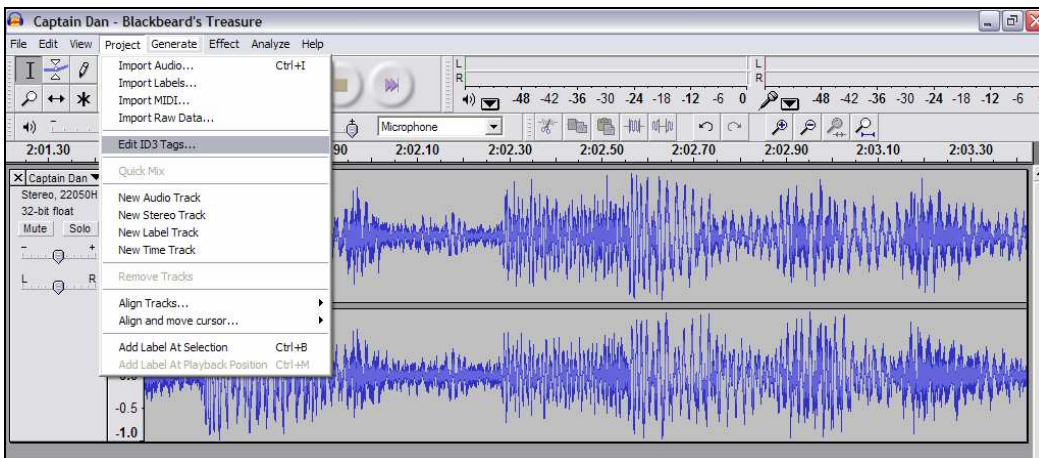


fig.2

3. You will then be presented with a menu. It is here where you will edit your ID3 tags. The first option you are given is to choose what type of tags you want. Select ID3v2.

You are then asked to give the name of your audio recording (e.g. Blackbeard's Treasure).

Next you are asked to give the name of the artist(s) who made the recording. Put your name (if you made it) or the name of your class or group (e.g. Captain Dan & His Scurvy Crew).

Next you must put in the album. If your audio recording is part of a series put the name of the series here. If not leave it blank.

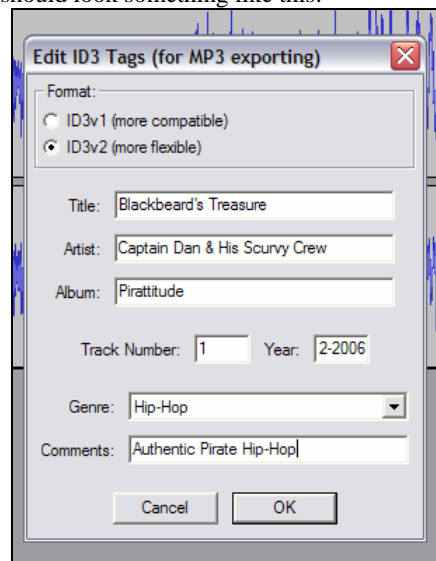
If your recording *is* part of a series than put the number it is in the series in the track number box. If not put '1'.

In the year box put in the date it was made (e.g. 17-12-2006).

Choose the genre of the recording from the drop-down box (e.g. Hip-Hop). If your recording contains mostly people talking then choose 'Speech'.

In the Comments box put a brief sentence or two describing what the recording is about. (e.g. Authentic Pirate Hip-Hop)

Your ID3 tags are now complete and should look something like this:



*fig.3*

Now press OK and then save the file.

## **B. ID3 Tagging Using Windows Explorer:**

The other way to create ID3 tags is by using Windows Explorer. (make sure the file is an mp3 file)

1. First open 'My Documents' (or wherever the file is held). Then right-click on the file. You will then see a menu similar to the one in fig.4.

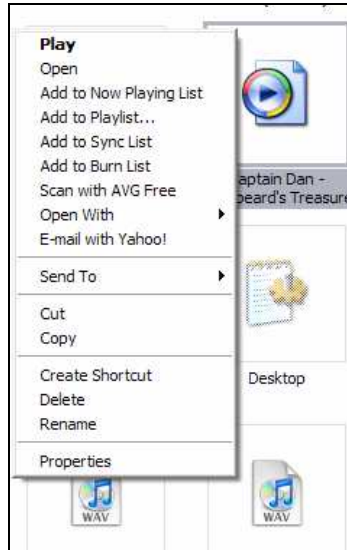


fig.4

Then click on the 'Properties' option.

2. You will then be presented with a menu similar to the one in fig.5. Press the 'Summary' tab at the top.

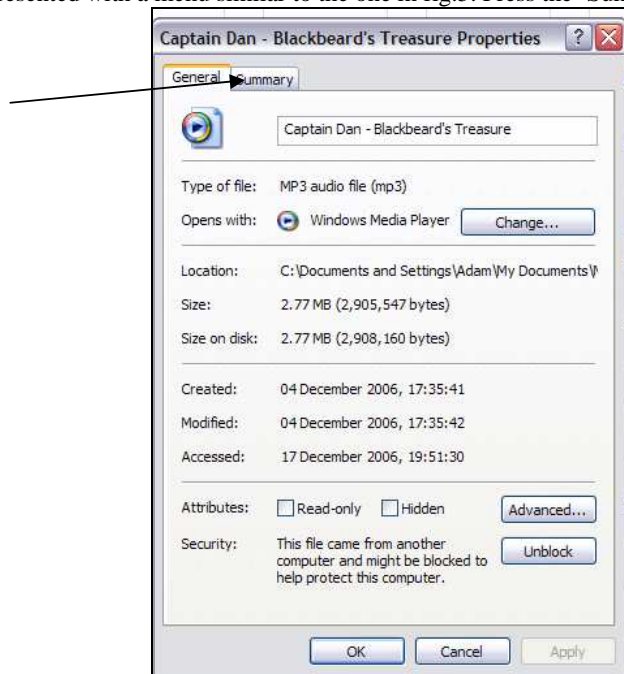


fig.5

3. You will then see information about the file. Press the 'Advanced' button at the bottom left. You should see something like fig.6.

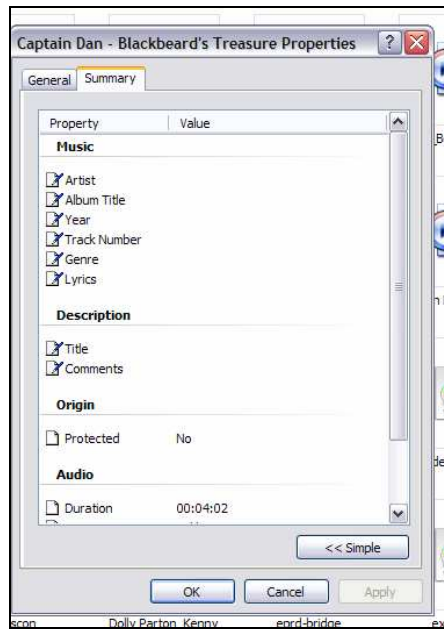


fig.6

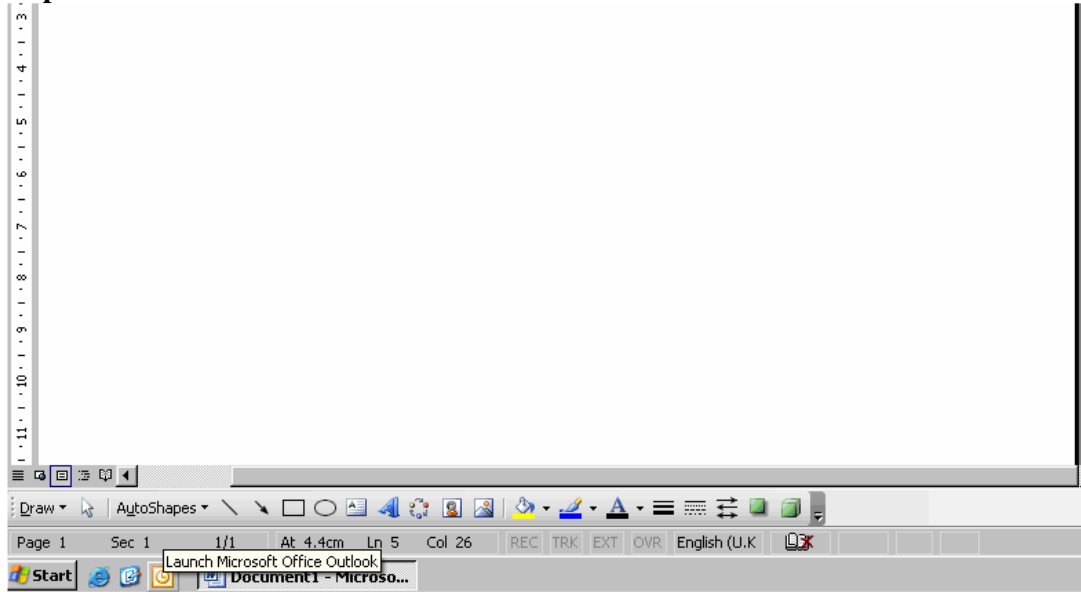
4. Put the information in as described in the Audacity section and press 'Apply'.

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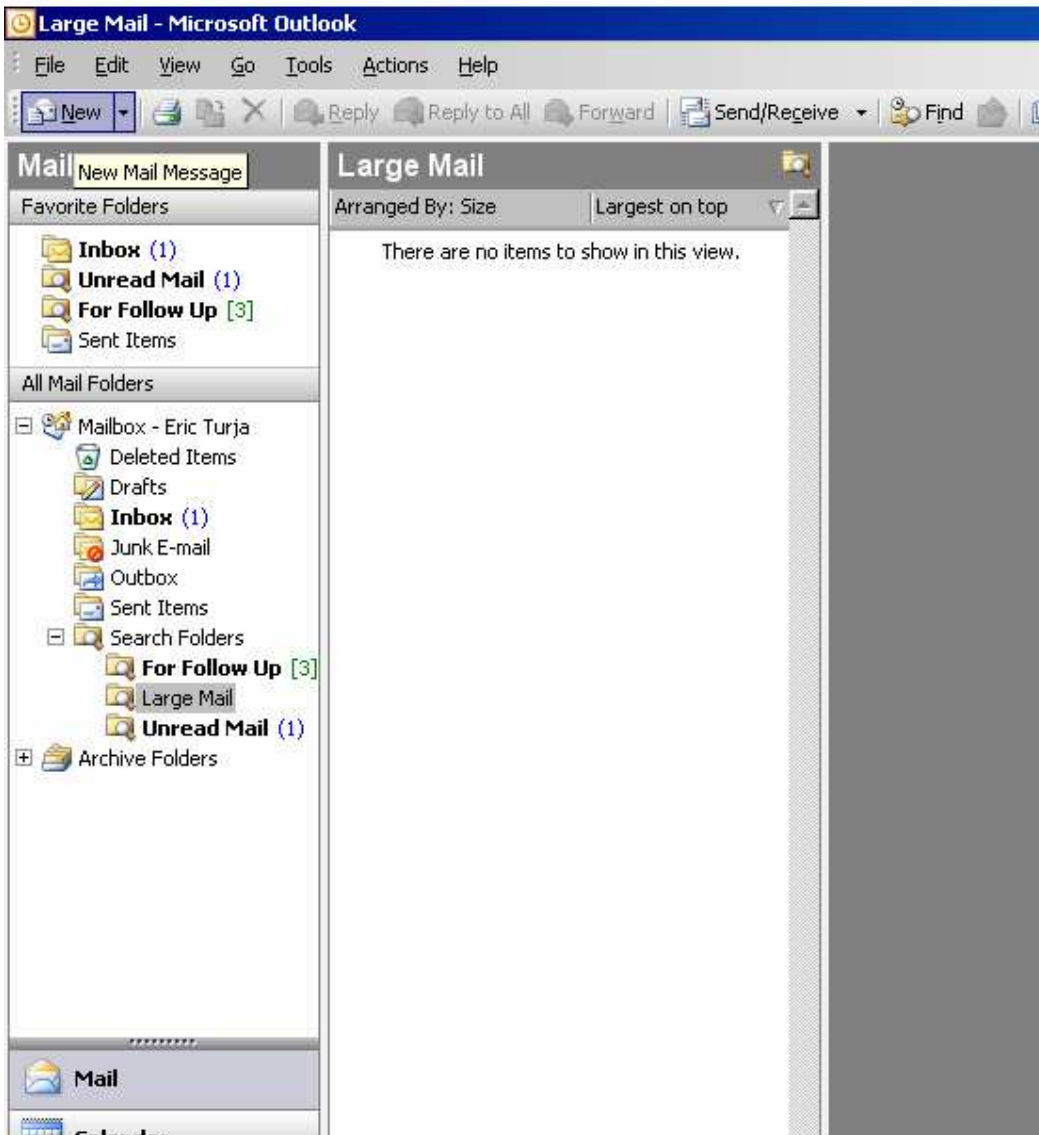
## IV. Getting the Podcast Uploaded

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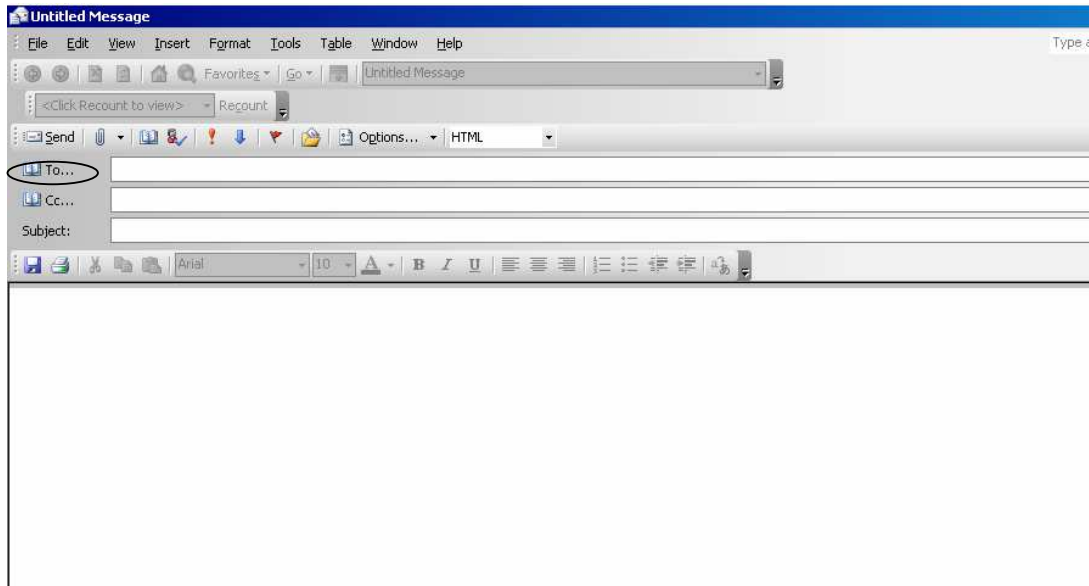
Your first step would be to open outlook express. This can be accessed from the bottom left of your screen. If not then click **Start**, got to **programs**, go to **Microsoft Office** and click on **Outlook Express**.



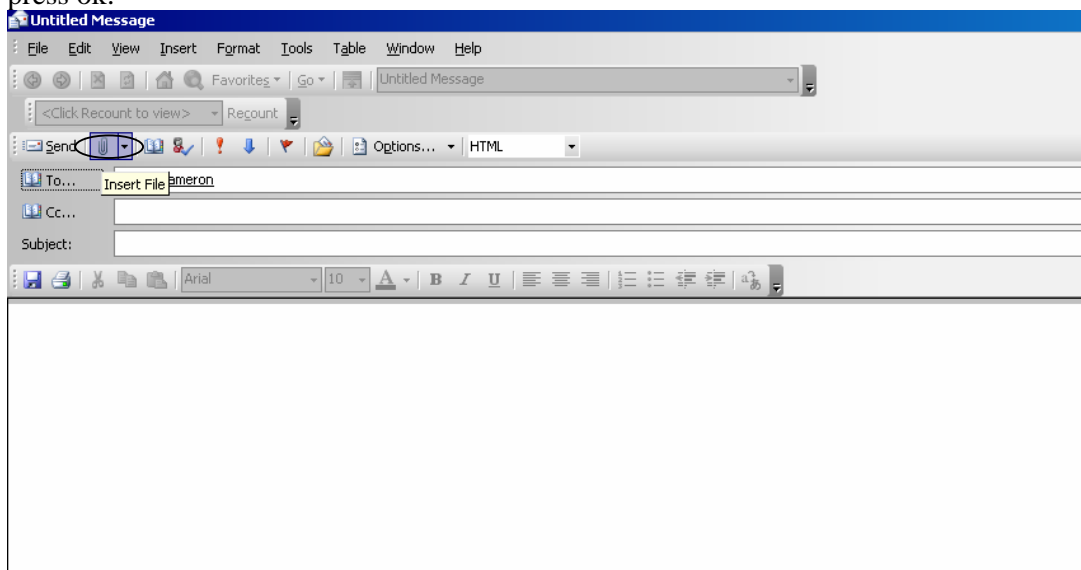
Now, when you are in Outlook Express you are going to want to send your podcast so your first step, then, would be to click on the **New** option found in the top left of the screen.



You will then go to a new composition for mailing.



Click on **To...** and type in **Judith Cameron** in the search box and click the name to add it. Then press ok.



Next you will want to click on the **insert file** option. Find your podcast file and insert it to the message. Make sure you add a subject and type a message politely asking Judith Cameron to upload your podcast to the school site. And finally click **send** to send your request.

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**V. Navigating the Webpage**

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