

	Backlog:	This is the actual product backlog.	
	Cards:	Index cards will appear here when you select the menu option "Story Cards > Create Cards".	
	Template:	Play with this to change the appearance of the generated index cards.	
		Make a copy of this Spreadsheet to your Google Docs account (File > Copy) before you start editing.	
		About this tool:	
		This is a simple tool for housing a Scrum product backlog.	
		The main feature is that includes a menu option - "Story Cards" - with options to create index cards.	
		This is a Google Spreadsheet version of the Microsoft Excel tool "Index Card Generator", created by Stefan Nijenhuis and Henrik Kniberg.	
		Current version: 1.1	
		<i>This version has a minor update: it will shorten the Story Name in the card if it is too long. Some users have had problems with page breaks, and it can be because of long story names. Keep them short, folks!</i>	
		Please contact me if you make any improvements or bugfixes!	
		The source code is now on GitHub!	
		https://github.com/DavidVujic/IndexCardGenerator	
		Follow me on twitter:	
		http://twitter.com/davidvujic	
		LinkedIn:	
		http://se.linkedin.com/in/davidvujic	

Id	Name	User story	How to test	Importance	Estimate
1	Create website	As a visitor I go to the website to access the synth. (simple HTML page, HTTP server)	The visitor can access the synth website		
2	Play keys	As a visitor I push keys to play notes. (JS binding sound function to keypress and mouse click, or use the keyboard)	The visitor will hear a sound when a key on the PC keyboard is pressed/ a key on the GUI is clicked.		
3	Polyphony	As a visitor I want to be able to play multiple notes simultaneously, aka polyphony.	Pressing two or more keys should make a sound of the superposition of the two notes		
4	Create waveform	As a visitor I type a mathematical function to create a periodic waveform. (String parsing, Probably JS)	entering a valid mathematical function into the field will result in the function being successfully parsed.		
5	Display waveform	As a visitor i want to be able to view the graph of the wave. (Graphical representation)	The above entered function should be plotted in a visually appealing way.		
6	Create envelope	As a visitor I type a mathematical function to create an envelope. (Graphical representation)	Entering a valid mathematical function will give an envelope that can be used for various parts of the sound generation. There will be limitations put in place.		
7	Display envelope	As a visitor i want to be able to view the graph of the envelope. (Graphical representation)	The envelope is plotted in a visually appealing way.		
8	Change amplitude	As a visitor I create an envelope to change the amplitude. (Sound editing)	After entering a valid envelope, the amplitude of the sound will be changed accordingly		
9	Change pitch	As a visitor I create an envelope to change the pitch. (Sound editing)	After entering a valid envelope, the pitch of the sound will be changed accordingly		
10	Change timbre	As a visitor I create an envelope to change the timbre. (Sound editing)	After entering a valid envelope, the timbre of the sound will be changed accordingly		
11	Save synth settings	As a visitor I save the settings of the synth to use it later. (Cookies/long url)	After closing a session, opening the session again should load the settings of the last session.		
12	Piano roll	As a visitor I want to have a graphically interactive piano roll so that i can compose musical scores.	Visitor can "click out" notes on a piano roll that will play continuously.		
13	Multiple synths	As a visitor I want to add multiple synths that can play simultaneously in the piano roll.	The visitor can "click out" notes from multiple different synths that will play.		
14	Audio recording	As a visitor I want to be able to record and save myself playing on the synth. (MP3 Generations)	Pressing a "record" button should take in the inputs and generate a mp3 file that can be listened to.		
15	MIDI keyboard	As a visitor I want support for a MIDI keyboard that is connected to my computer that has opened the website. (MIDI interface)	Having a plugged in MIDI keyboard should function and play notes like the regular PC keyboard.		

	Id	1			
		Create Website			
		User story		Importance	
		As a visitor I go to the website to access the synth. (simple HTML page, HTTP server)			
		How to test		Estimate	
		The visitor can access the synth website			
	Id	2			
		Play keys			
		User story		Importance	

		As a visitor I push keys to play notes. (JS binding sound function to keypress and mouse click, or use the keyboard)			
		How to test		Estimate	
		The visitor will hear a sound when a key on the PC keyboard is pressed/ a key on the GUI is clicked.			
	Id	3			
		Polyphony			
		User story		Importance	
		As a visitor I want to be able to play multiple notes simultaneously, aka polyphony.			

		How to test		Estimate	
		<i>Pressing two or more keys should make a sound of the superposition of the two notes</i>			
	Id	4			
		Create waveform			
		User story		Importance	
		<i>As a visitor I type a mathematical function to create a periodic waveform. (String parsing, Probably JS)</i>			
		How to test		Estimate	
		<i>entering a valid mathematical function into the field will result in the function being successfully parsed.</i>			

	Id	5			
		Display waveform			
		User story		Importance	
		As a visitor i want to be able to view the graph of the wave. (Graphical representation)			
		How to test		Estimate	
		The above entered function should be plotted in a visually appealing way.			

	Id	6			
		Create envelope			
		User story		Importance	
		<i>As a visitor I type a mathematical function to create an envelope. (Graphical representation)</i>			
		How to test		Estimate	
		<i>Entering a valid mathematical function will give an envelope that can be used for various parts of the sound generation. There will be limitations put in place.</i>			
	Id	7			
		Display envelope			
		User story		Importance	

		As a visitor i want to be able to view the graph of the envelope. (Graphical representation)			
		How to test		Estimate	
		The envelope is plotted in a visually appealing way.			
	Id	8			
		Change amplitude			
		User story		Importance	
		As a visitor I create an envelope to change the amplitude. (Sound editing)			

		How to test		Estimate	
		<i>After entering a valid envelope, the amplitude of the sound will be changed accordingly</i>			
	Id	9			
		Change pitch			
		User story		Importance	
		<i>As a visitor I create an envelope to change the pitch. (Sound editing)</i>			
		How to test		Estimate	
		<i>After entering a valid envelope, the pitch of the sound will be changed accordingly</i>			

	Id	10			
		Change timbre			
		User story		Importance	
		<i>As a visitor I create an envelope to change the timbre. (Sound editing)</i>			
		How to test		Estimate	
		<i>After entering a valid envelope, the timbre of the sound will be changed accordingly</i>			

	Id	11			
		Save synth settings			
		User story		Importance	
		As a visitor I save the settings of the synth to use it later. (Cookies/long url)			
		How to test		Estimate	
		After closing a session, opening the session again should load the settings of the last session.			
	Id	12			
		Piano Roll			
		User story		Importance	

		As a visitor I want to have a graphically interactive piano roll so that i can compose musical scores.			
		How to test		Estimate	
		Visitor can "click out" notes on a piano roll that will play continuously.			
	Id	13			
		Multiple Synths			
		User story		Importance	
		As a visitor I want to add multiple synths that can play simultaneously in the piano roll.			

		How to test		Estimate	
		<i>The visitor can "click out" notes from multiple different synths that will play.</i>			
	Id	14			
		Audio Recording			
		User story		Importance	
		<i>As a visitor I want to be able to record and save myself playing on the synth. (MP3 Generations)</i>			
		How to test		Estimate	
		<i>Pressing a "record" button should take in the inputs and generate a mp3 file that can be listened to.</i>			

	Id	15			
		MIDI Keyboard			
		User story		Importance	
		<i>As a visitor I want support for a MIDI keyboard that is connected to my computer that has opened the website. (MIDI interface)</i>			
		How to test		Estimate	
		<i>Having a plugged in MIDI keyboard should function and play notes like the regular PC keyboard.</i>			

	Id						(read more in comment) [1]
		Story name					
		User story		Importance			
		How to test		Estimate			

[1] The area A1:F10 are the contents of the template.

Keep the Story Name short.

NOTE: The current version of Google Docs does not support page brakes. This template has the row heights set to match two story cards per page (in A4 format).

The Google Docs printing function seems to have a bug. It is not possible to print text that has vertical alignment set to other than top.