



# Welcome

SLQ Wiki Fabrication Lab 2026/01/31 08:23

# Welcome

Welcome to The Edge Programming wiki. This is the home page for SLQ staff, and will give a little instruction on how to use this wiki. Hit [me](#) up if you have any questions, requests or complaints.

## SLQ Wiki - Basics

## Getting Around

On the left you can see our navigation menu. This menu uses the page names and *namespaces* (more on namespaces later) to create the structure.

On the right is the Table of Contents (TOC) for the page you are on.

Before you start editing or creating, you will need to be logged in. Please check out the Dokuwiki [syntax](#) and the [SLQ Wiki Contributors Guide](#).

## To Create a Page

Creating a page is as simple as writing a link - to a page that doesn't exist....

The simplest way is to enter a new link directly in the address bar. For example the link to this page is:

[https://wiki.edgeqld.org.au/doku.php?id=facilities:slq\\_wiki:start](https://wiki.edgeqld.org.au/doku.php?id=facilities:slq_wiki:start)

If you change the last word from "start" to "my new page" (and you have the correct access privileges) you will be directed to the "create a new page".

[https://wiki.edgeqld.org.au/doku.php?id=facilities:slq\\_wiki:my\\_new\\_page](https://wiki.edgeqld.org.au/doku.php?id=facilities:slq_wiki:my_new_page)

Before you create a page, decide which *namespace* you want to put it in. For example the prototypes namespace contains all our prototyping documentation. The first page in a namespace by convention is called "start". So to create a new prototype page in this space for my new *pocket time machine* I would use this syntax.

```
[[prototypes:pocket time machine:start]]
```

Once your page is created, it will appear in sidebar, but if you can't find it - don't panic - check the sitemap, which is in the top page tools menu.

## Sitemap

This is a sitemap over all available pages ordered by 🗂 namespaces.

- 📁 edgeip
- 📁 fabrication
- 📁 partnerships
- 📁 playground
- 📁 programtheme2016-17
- 📁 prototypes
- 📁 recordingstudio
- 📁 robots
- 📁 space\_activation
- 📁 tinygigs
- 📁 wiki
- 📁 workshops
- 📄 navigationmenu
- 📄 sidebar
- 📄 **The Edge Programming wiki**

Now you know how to edit - its time to learn some syntax.

## Dokuwiki Syntax






























For a full explanation of Dokuwiki syntax check out [Formatting Syntax](#).

## To Edit a Page

To edit a whole page, use the edit page button in the floating tool bar, or in the top menu.

This will open dokuwikis built in editor....

Edit the page and hit **Save**. See [Formatting Syntax](#) for Wiki syntax. Please edit the page only if you can **improve** it. If you want to test some things, learn to make your first steps on the [playground](#).

**B** *I* U **TT** **S**                                                   

Dokuwiki uses simple syntax for generating HTML, somewhat like [markdown](#) . The is easy to use, but the editor also has a built in cheat menu, where you can click and add formatting. The syntax keeps our documentation in txt format, ready to be converted to any other format imaginable..

You can also edit just sections of a page by clicking on the *edit* button below each section.

## Modify an Existing Page

1) I'll start with the locks prototype. Mick has helpfully made some prep-production information for use to experiment with. Lets try removing that section from the main page and *including* it from another page called preprod.

First up, make a page in `prototypes:lock` using;

```
[[prototypes:lock:preprod]]
```

2) Right click on the new link - it will be red to indicate the page does not yet exist.

## Before the workshop

```
preprod
```

This is information for the facilitator and involves the materials that need to be developed for each participant prior to the workshop.



3) Now go back to the lock page and edit it. Select the pre-production information and copy it.

You are here / [prototypes](#) / [Lock](#)

prototypes:lock

Edit the page and hit **Save**. See [Formatting Syntax](#) for Wiki syntax. Please edit the page only if you can **improve** it. If you want to test some things, learn to make your first steps on the [playground](#).



Draft autosaved on 2016/04/13 11:50

==== Pre-Production ====

- Laser cut hull
- Laser cut plug
- Laser cut lock pick and key pin rings
- Laser cut tension wrench
- Saw metal pipe (pin Sleeve)
- Saw dowel length and indentation (for o-ring)
- Saw and drill plug housing

You will need to cut the following materials and documents for a single kit (if not specified otherwise).

- **\*\*Hull\*\***
  - 1x A3 6mm cardboard - lock\_hull\_1\_v2-sheet.cdr - Approx. 1 min 40 sec per sheet
  - 1x A3 6mm cardboard - lock\_hull\_2\_v2-sheet.cdr - Approx. 1 min 40 sec per sheet
- **\*\*plug\*\***
  - 1x A3 3mm cardboard - lock\_plug\_v2-sheet.cdr - Approx. 3 min per sheet
- **\*\*Lock Pick & Key Pin rings\*\***
  - 1x A3 3mm Acrylic - lock\_pick\_v2-sheet.cdr - (This will produce shitloads of picks and rings)
- **\*\*Tension wrench\*\***
  - 1x A3 6mm Acrylic - lock\_tension\_v2-sheet.cdr - (This will produce shitloads of wrenches)
- **\*\*Metal Pipe\*\***
  - 1x 50mm (10mm O/D) metal pipe

☒ Continue editing after saving

Note: By editing this page you agree to license your content under the following license: [CC Attribution-Share Alike 3.0 Unported](#)

4) Jump back to your :lock:preprod page and 'create page' then paste the pre-production content in.

You can create this page **importing an odt file** from your computer.  
More the file follows the word processing rules, better will be the result

Import an odt file

Browse...

No file selected.

Upload

Edit the page and hit **Save**. See [Formatting Syntax](#) for Wiki syntax. Please edit the page only if you can **improve** it. If you want to test some things, learn to make your first steps on the [playground](#).

B I U TT &                               

```
{:prototypes:img_6897.jpg?200}}
{:prototypes:img_6896.jpg?200}}
{:prototypes:img_6899.jpg?200}}
{:prototypes:img_6902.jpg?200}}
{:prototypes:img_6904.jpg?200}}
{:prototypes:img_6905.jpg?200}}
```

check alignment of holes on example plug are within tolerance

```
{:prototypes:img_6906.jpg?200|}}
{:prototypes:img_6907.jpg?200|}}
```

☐ Continue editing after saving


### Preview

Cancel

[Edit summary](#)

created

☐ Minor Changes

Note: By editing this page you agree to license your content under the following license:  CC Attribution-Share Alike 3.0 Unported

5) Click save and check it looks good.

## Pre-Production

1. Laser cut hull
2. Laser cut plug
3. Laser cut lock pick and key pin rings
4. Laser cut tension wrench
5. Saw metal pipe (pin Sleeve)
6. Saw dowel length and indentation (for o-ring)
7. Saw and drill plug housing

You will need to cut the following materials and documents for a single kit (if not specified otherwise).

- 1. Hull**
  - a. 1x A3 6mm cardboard - lock\_hull\_v1-sheet.cdr - Approx. 1 min 40 sec per sheet
  - b. 1x A3 6mm cardboard - lock\_hull\_v2-sheet.cdr - Approx. 1 min 40 sec per sheet
- 2. Plug**
  - a. 1x A3 3mm cardboard - lock\_plug\_v2-sheet.cdr - Approx. 3 min per sheet
- 3. Lock Pick & Key Pin rings**
  - a. 1x A3 3mm Acrylic - lock\_pick\_v2-sheet.cdr - (This will produce shilloads of picks and rings)
- 4. Tension wrench**
  - a. 1x A3 6mm Acrylic - lock\_tension\_v2-sheet.cdr - (This will produce shilloads of wrenches)
- 5. Metal Pipe**
  - a. 1x 50mm (10mm O/D) metal pipe
- 6. Key and Set Pins**
  - a. 3x 30cm (6mm O/D) dowel (Set pins)
  - b. 3x 25mm (6mm O/D) dowel (Key pins)
    - i. Key pins will need a slight groove (no more than 1mm deep, 1mm wide, 3-4mm from top) for the o-rings
    - ii. Put o-ring on key pin and make sure it doesn't fit through the acrylic key pin ring (step 2 above)
- 7. Plug Housing**
  - a. 1x 50mm (60mm O/D) postage tube
    - i. Drill 3x holes in the housing (use acrylic hole template) This needs to be very straight and accurate!

- Material prep process

```
{{page>prototypes:lock:preprod}}
```

7) This will insert the preprod page seamlessly into the locks page. For staff and admin the page will look like this;

**Lock**

**Summary**

During this workshop participants will learn how to make a lock and learn how to pick the lock with some supplied lock-picking tools.

**Pre-Production**

This information is for the pre-production process of preparing materials for the workshop kits.

1. Laser cut hull
2. Laser cut plug
3. Laser cut lock pick and key pin rings
4. Laser cut tension wrench
5. Saw metal pipe (pin Sleeve)
6. Saw dowel length and indentation (for o-ring)
7. Saw and drill plug housing

You will need to cut the following materials and documents for a single kit (if not specified otherwise).

1. **Hull**
  - a. 1x A3 6mm cardboard - lock\_hull\_1\_v2-sheet.cdr - Approx. 1 min 40 sec per sheet
  - b. 1x A3 6mm cardboard - lock\_hull\_2\_v2-sheet.cdr - Approx. 1 min 40 sec per sheet
2. **Plug**
  - a. 1x A3 3mm cardboard - lock\_plug\_v2-sheet.cdr - Approx. 3 min per sheet
3. **Lock Pick & Key Pin rings**
  - a. 1x A3 3mm Acrylic - lock\_pick\_v2-sheet.cdr - (This will produce shifloads of picks and rings)
4. **Tension wrench**
  - a. 1x A3 6mm Acrylic - lock\_tension\_v2-sheet.cdr - (This will produce shifloads of wrenches)
5. **Metal Pipe**
  - a. 1x 50mm (10mm O/D) metal pipe
6. **Key and Set Pins**
  - a. 3x 30cm (6mm O/D) dowel (Set pins)
  - b. 3x 25mm (6mm O/D) dowel (Key pins)
    - i. Key pins will need a slight groove (no more than 1mm deep, 1mm wide, 3-4mm from top) for the o-rings

But as a standard user this is what you will see.



[/ Lock](#)

prototypes:lock

# Lock

## Summary

During this workshop participants will learn how to make a lock and learn how to pick the lock with some supplied lock-picking tools.

### Materials

These materials are per participant if not specified otherwise.

- 1 x A3 corrugated cardboard sheet, 3mm
- 2 x A3 corrugated cardboard sheets, 6mm
- 1 x Postage tube, 50mm (O/D:60mm)
- 3x 50mm metal pipe (I/D: 9mm O/D: 10mm)
  - 3 x 50mm
- 3 x Retractable Ballpoint pen (for spring)
- 6 x Skewers (3mm diameter)
- 3 x 30mm Dowel (Diameter: 6mm)
- 3 x 25mm Dowel (Diameter: 6mm)
- 3 x O-ring (I/D: 4.1mm O/D: 7.3mm), Nitrile rubber
- 4 x strong mini magnets
- Electrical tape

### Tools

Tools required during the workshop. It is not required that one of each is supplied for participants but one tool per two participants is preferred.

1. Rounded files (not too rough)
2. Pliers (for biting off skewers)
3. Scissors (for cutting tape)
4. Covered footwear
5. Tinfoil hat

### Instructions

## Create a Pre-Production Page from Scratch

This is simpler - just create your preprod page the same as in step 1) above, and do all your pre-production documentation in there. Once its complete, use and *include* tag to insert the pre-prod information into your main page.

## Exporting Content

You can export a PDF or ODT file of the page you are on by using the buttons in floating tool bar on the right.



## Namespaces and Page Names

A page in a dokuwiki is just a text file. You can see it in the bottom right of this page - in this case its called "start.txt". The page is always the last word in the URL link to the page (provided you are not editing it). A namespace is like a folder or section - a namespace can contain pages or other namespaces.

## Using a page as slides

You can set up a page in such a way that you can also view its content as a silde deck, which is great for workshops and inductions. This is through a function called [RevealJS](#)

## Exporting a page to PDF

Each page will have a button in the top right that allows you to export it to PDF. Great for printing handout notes!

## Using the Include Function for Documentation

we can use the *include* plugin to insert information from one page into other pages.

As a first example we will modify an existing page to create a pre-production page, then we'll make a *preprod* page from scratch.

## Hiding Text

you can hide text from the page but keep it in the editable code by using the hide wrapper. click edit to see the code for the snippet below:

## Using Regex to fix formating

Regex is handy to bulk replace syntax. This requires an external editor that supports regex - I recommend SublimeText 3 as it supports standard regex (PHP).

You can also test your regex with this neat site. <https://regex101.com/r/vF7jY9/4>

Say I want to replace the tags `<wrap em></wrap>` with `<WRAP hide></WRAP>`

The tricky part about this is the closing tag `</wrap>` is used over and over. Sometimes to close `<wrap em>` but also with `<wrap lo>` or `<wrap box>` .. etc. etc.

As an example say we want to replace

```
<wrap  
em>{{background>::hp8100:082_cpu_thermal_paste_apply_1920.jpg}}</wrap>
```

With

```
<WRAP  
hide>{{background>::hp8100:082_cpu_thermal_paste_apply_1920.jpg}}</WRAP>
```

Using the regex to **find**

```
<wrap em>(.*?)</wrap>
```

we then get the matches for:

- `<wrap em>` matches the characters `<wrap em>` literally (case sensitive)

Then we get a whole bunch of stuff matching inside the braces (called a *capture group*)

- `.` matches any character (except for line terminators)
- `*?` Quantifier — Matches between zero and unlimited times, as few times as possible, expanding as needed (lazy)

Finally we have

`<` matches the character `<` literally (case sensitive) `/` matches the character `/` literally (case sensitive)  
`wrap>` matches the characters `wrap>` literally (case sensitive)

Then we need to **replace** with the regex

```
<WRAP hide>\1</WRAP>
```

## Finding big text chunks

It gets a little trickier if we want to find entire sections of text that may include line breaks. In this case we can use the `^` character.

```
<wrap lo>([^\n]+)</wrap>
```

This is close to our previous example. We get the matches for:

- `<wrap lo>` matches the characters `<wrap lo>` literally (case sensitive)

Then we get the first capture group `([^\n]+)`

- [^] matches any character, including newline
- + Quantifier — Matches between one and unlimited times, as many times as possible, giving back as needed

Finally we have ;

```
* < matches the character < literally (case sensitive)
* \/ matches the character / literally (case sensitive)
* wrap> matches the characters wrap> literally (case sensitive)
```

## Displaying External Sites in Dokuwiki

There are a couple of ways to embed external web content in dokuwiki. The easiest way is to use the iframe plugin.

### iframe plugin

The [iframe plugin](#) can be used to directly embed a website in an iframe.

```
{{url> http://www.example.com/somepage.html}}
```

## Sidebars

Sidebars lie on the left hand side of each page and contain handy quick links and info.

They work in two ways, the default is that they inherit a simple list of links from their parent in the sitemap (accessed by going to tools>sitemap from that page). the list will contain everything below their parent heading (their sibling pages).

But you can also edit a sidebar as you would a page. To do so, create a page called sidebar under the relevant parent page in the url/sidebar structure.

## Images - Media Manager

Full size images can use codes to change the orientation of an image, read more here - [http://sylvana.net/jpegcrop/exif\\_orientation.html](http://sylvana.net/jpegcrop/exif_orientation.html)

## Adding Users

The SLQ Wiki works in conjunction with the State Library's membership system -

<https://www.slq.qld.gov.au/get-involved/become-member>

Direct link to user login - <https://patron.slq.qld.gov.au/Register>

Once a user has become a member, they have read access to the public pages of the SLQ Wiki. If you need to add someone as a contributor so they can add pages and edit, then State Library staff can use the Updater system to add access, see below for the steps.

URL for SLQ staff - <https://updater.slq.qld.gov.au/user/EdgeMove>

### STEP 1:

Staff User Information Tool

Staff

[Change your own account details.](#)

VIS

[Public Patron Utility](#)  
[Display Duplicate Email Accounts](#)

Applied Creativity

[Staff Admin Utility](#)  
[Patron Admin Utility](#)  
[Patron Report Utility](#)  
[Find deleted induction account details](#)

Dokuwiki

[EdgeWiki User Groups Utility](#)

Edge User Group Utility.

Begin typing in search box to find account.

### STEP 2:

Staff

[Change your own account details.](#)

VIS

[Public Patron Utility](#)  
[Display Duplicate Email Accounts](#)

Applied Creativity

[Staff Admin Utility](#)  
[Patron Admin Utility](#)  
[Patron Report Utility](#)  
[Find deleted induction account details](#)

Dokuwiki

[EdgeWiki User Groups Utility](#)

Edge User Group Utility.

User details search!

Begin typing in search box to find account.

Username	Name	Address	AD Group	Action
michelleliza	Michelle Brown		QLD Residents	<a href="#">Modify Security Groups</a>

### STEP 3:

Staff

[Change your own account details.](#)

VIS

[Public Patron Utility](#)  
[Display Duplicate Email Accounts](#)

Applied Creativity

[Staff Admin Utility](#)  
[Patron Admin Utility](#)  
[Patron Report Utility](#)  
[Find deleted induction account details](#)

Dokuwiki

[EdgeWiki User Groups Utility](#)

Edge User Group Utility.

Add selected user to specified security group!

Begin typing in search box to find account.

User ID

michelleliza

Security Group

☐ SG\_Dokuwiki\_ACL\_Edge\_Edgewiki\_Contributors

☐ SG\_Dokuwiki\_ACL\_Edge\_CCC Labs\_Contributors

☐ SG\_Dokuwiki\_ACL\_Edge\_Edgewiki\_HackTheEvening

☐ SG\_Dokuwiki\_ACL\_Edge\_Edgewiki\_VolunteerEditors

☐ SG\_Dokuwiki\_ACL\_Edge\_Edgewiki\_RegionalEditors

Add or remove user from selected security groups

Modify security groups.

[log](#)