



Free**Nest**
Product Platform

FreeNest Brand

Basic Material for testing course



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Testing Course Agenda

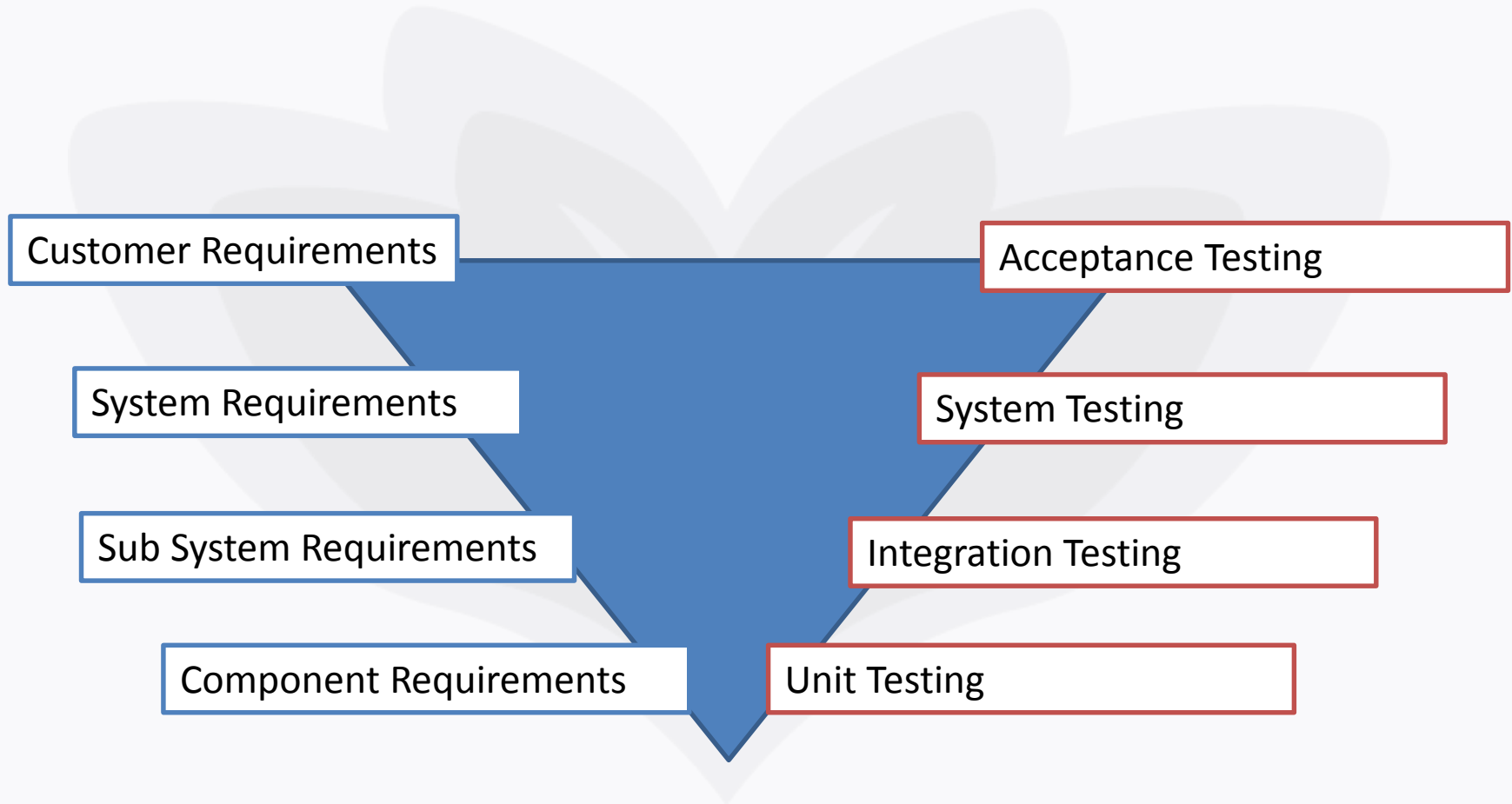
- Learn basic concepts to understand testing process and work
- Requirement engineering and management
- Agile methods and testing
- Test design & execution
- Test Planning & Management
- Test Automation
- Continuous Integration & Testing
- Understand how and why testing is important



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- This material is for general training for Test Design and management
- Material is more supportive in class room
- Material will be updated during courses
- FreeNest Portable Project Platform is used to demonstrate things only in practice. This is not limiting usage for material for other training environments (I hope 😊)

V-Model for testing



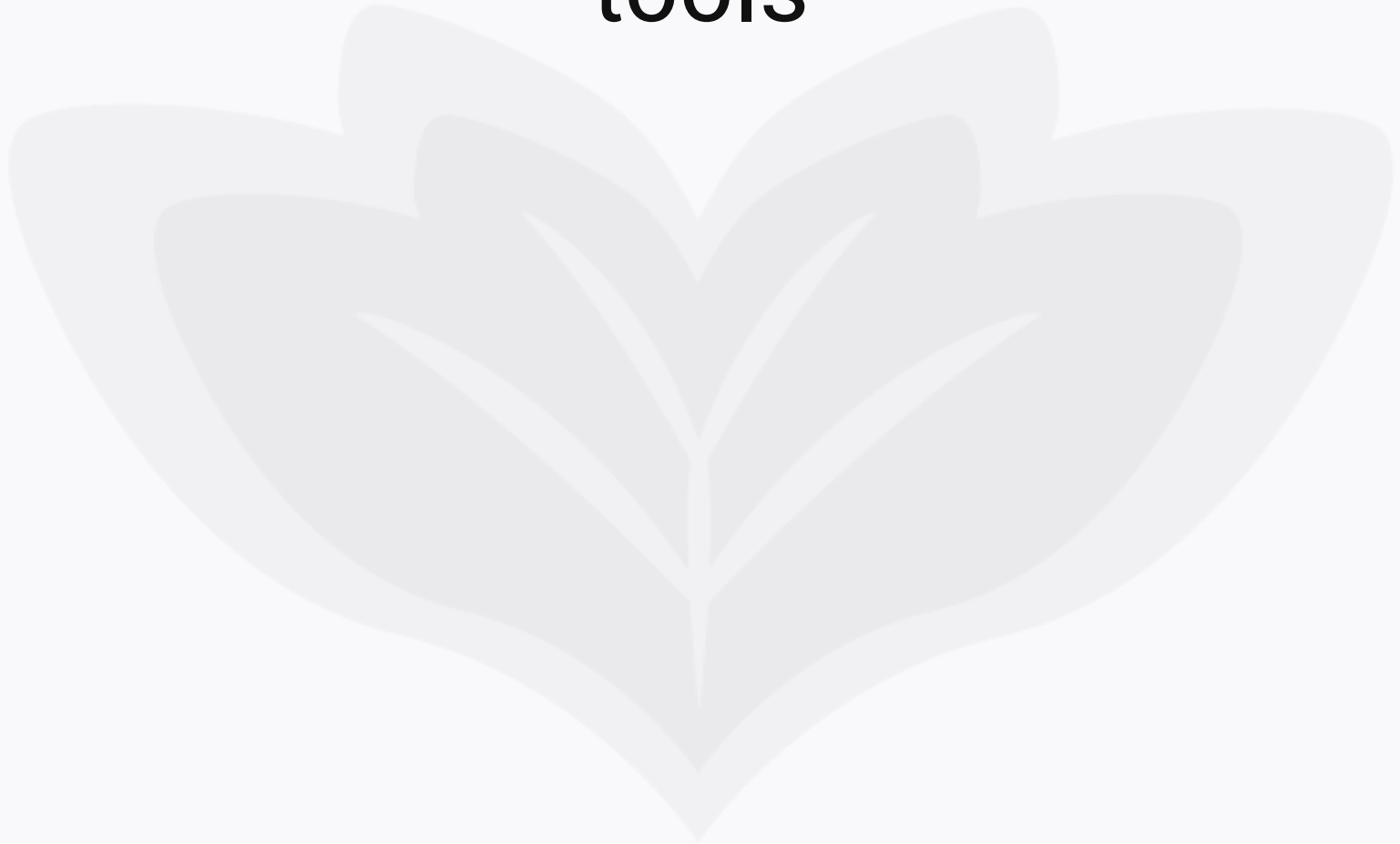
Regression testing

- Monkey Testing?
- Frust



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Test Automation Frameworks and tools



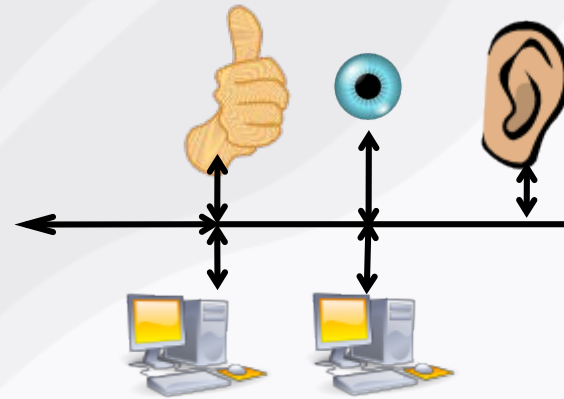
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Why Test Automation Framework?

- There has to be common way to communicate with test environment. Test Automation Framework provides it



Test Team communicates with common language



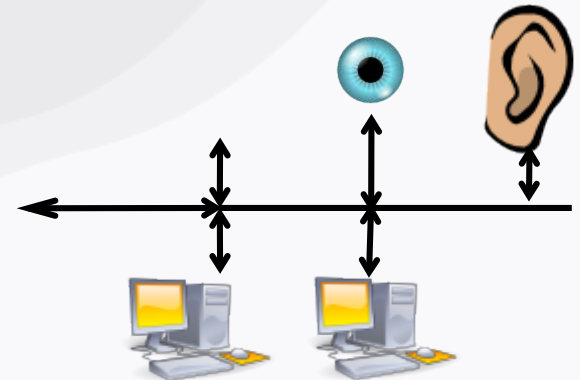
Test Automation Framework provides a way to Control testing environment with common way



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STAF as foundation for test automation

- The Software Testing Automation Framework (STAF) is an open source, multi-platform, multi-language framework designed around the idea of reusable components, called services
- STAF removes the tedium of building an automation infrastructure, thus enabling you to focus on building your automation solution
- The STAF framework provides the foundation upon which to build higher level solutions, and provides a pluggable approach supported across a large variety of platforms and languages.



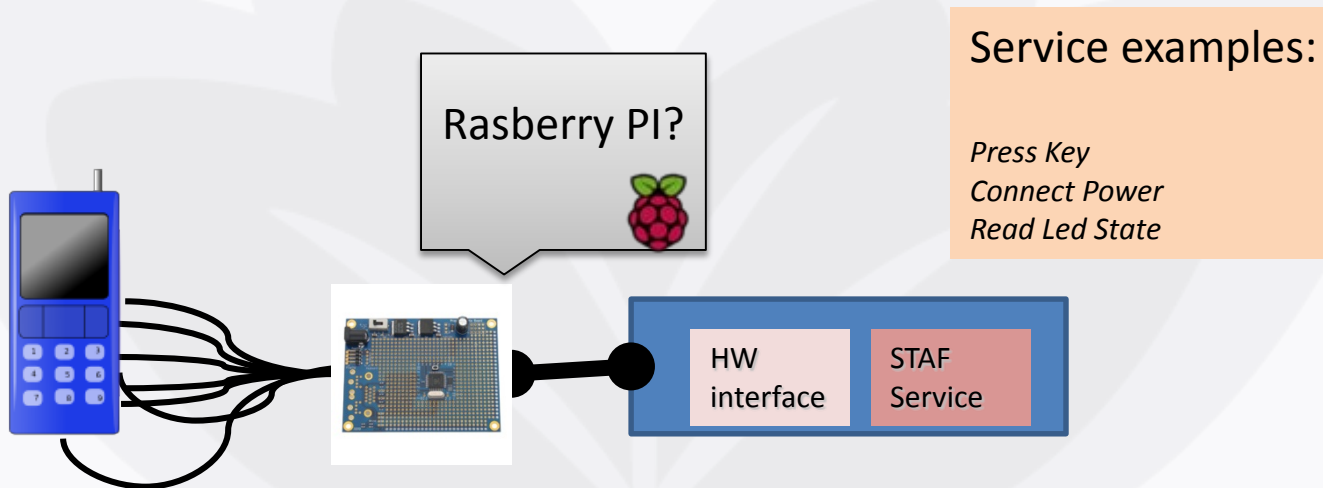
<http://staf.sourceforge.net/>

Test Environment Example

- TED = Test Environment Device
- Test Environment Devices are "lego" bricks of for test scenario building.
- TED's can be used as service interfaces to DUT (Design/Device under test)
- TED service has to be programmed to use DUT API/interface
- Test Automation needs support for virtual "eyes" and "arms". TED's can be also used such a way
- All TED 's are communicating using STAF Network
-

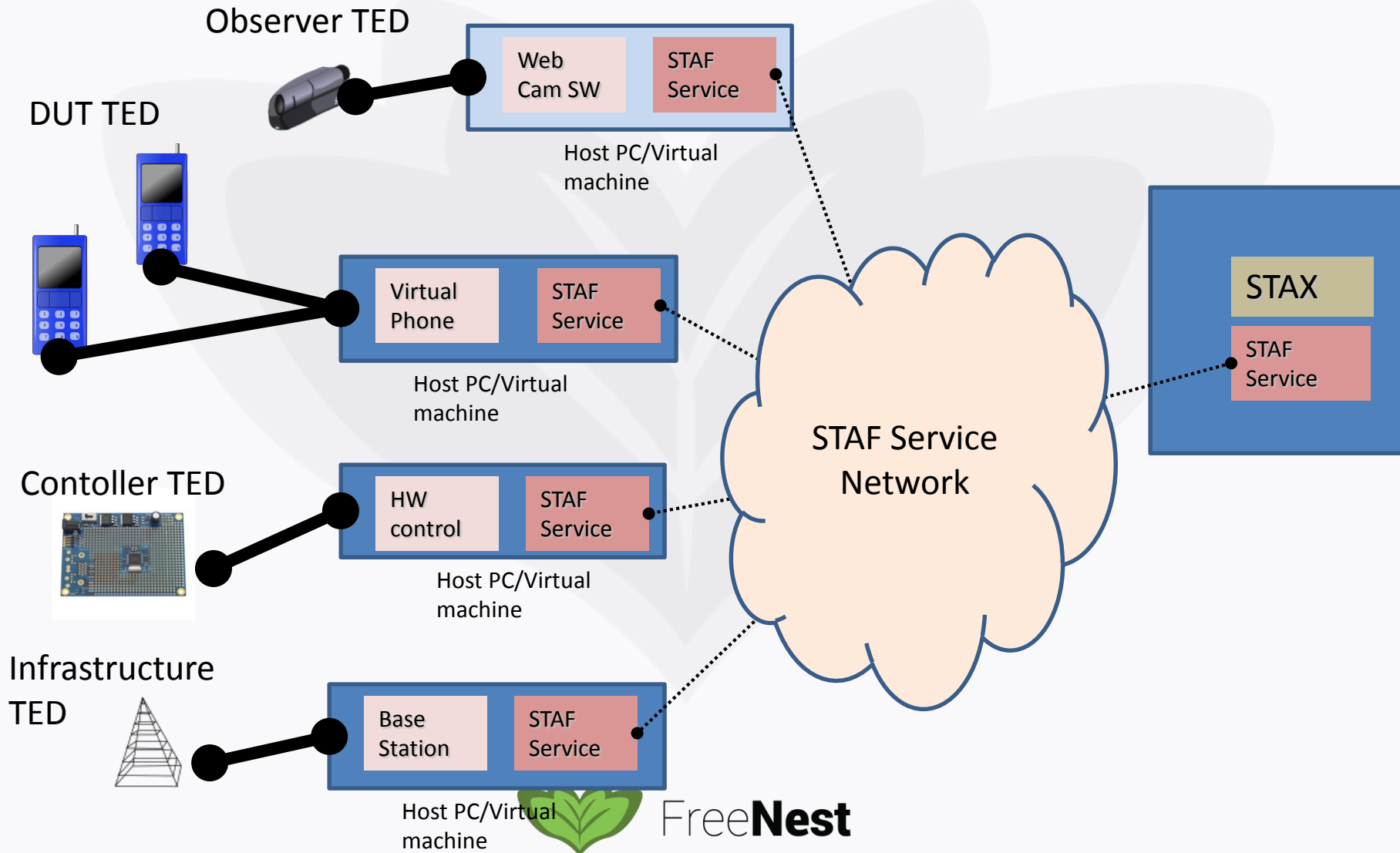


TED "virtual hand" ☺

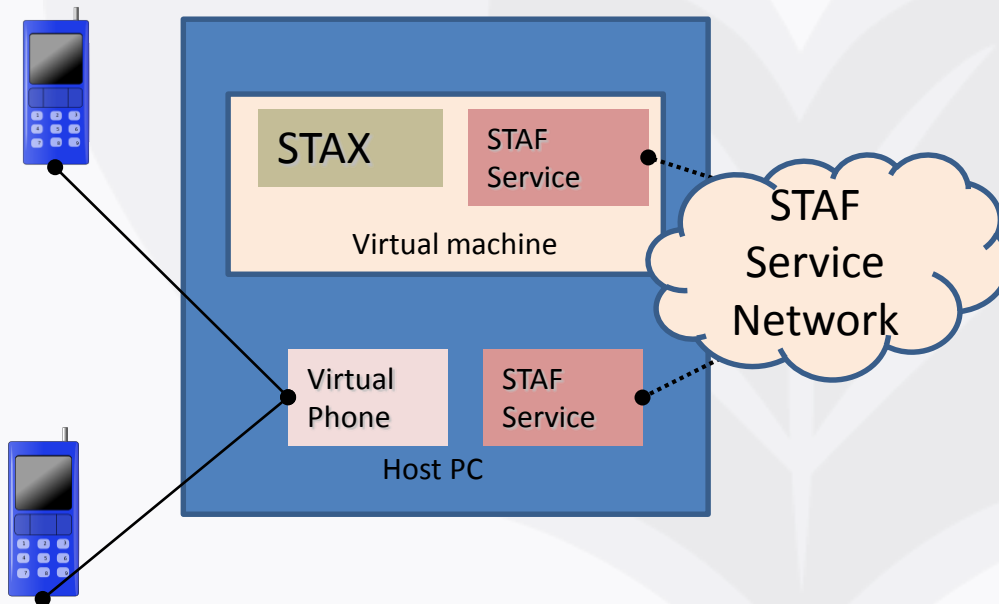


<http://www.raspberrypi.org/>

Using STAF/STAX in PMR testing



DUT TED



```
#Presettings
Case_Passed=False

PMRRadioA.Select DMO_Mode
PMRRadioB.Select DMO_Mode
PMRRadioA.Select DMO_Channel( 10)
PMRRadioB.Select DMO_Channel (10)
#Case start
PMRRadioB ResetDMOCallCounter
PMRRadioB CountDMOCall

Do while call_count < 100
{
    PMRRadioB MakeDMOCall(5, 5)
    call_count ++
}

If (PMRRadioB .CallCounter = 100)
{
    Case_Passed= True
}

# Case End
```

- STAX executes test script using PMRRadio virtual phone service interface
- Virtual phone implementation is DUT specific



Ideas?

- There is need for hardware to control keypad with machine
- It's just a one small part of whole test automation
- How to control screen? You will need another test tool?





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FreeNest Brand



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What is The FreeNest Brand?

- We take branding seriously, The FreeNest Brand is our pride and joy.
- It is the message we want to send to the developer teams, customers and stakeholders.
- These guidelines must be followed in all FreeNest's print and electronic communications, marketing and informing.
- Documentation defines logo guidelines, typography and the use of colors.



Logo

- The main logo consists of two elements, the leaf and the text laying horizontally.
- You can also use the logo with the FreeNest text under the leaf, if you need. Don't do this often, the main logo should be the horizontal one.



Logo

- You can also use the logo with dark background and white text.
- You can use the logo with the “Product Platform” text under the FreeNest if the logo itself does not open up in the context.



Free**Nest**
Product Platform



Free**Nest**



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Logo

Do ...

- observe the free space around the logo.
- use the logo with black text when the background color is light.
- use the logo with white text when the background color is dark.
- use white, black or neutral backgrounds.
- respect our logos.
- keep the logo readable.

Don't ...

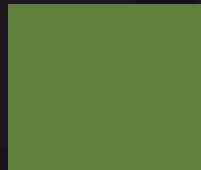
- squash or stretch the logo.
- alter the proportion of the logo.
- alter the layout of the logo.
- put anything over the logo.
- change the colors of the logo.



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Brand colors

- TMNT and Leaf Green are the main colors of the brand. You can find the colors from the FreeNest logos leaf. Logos typography has the color called 666. Use these green colors with light or dark background, but do not use TMNT color behind the logo.



TMNT

Hex: #5f8029

CMYK: C67 M30 Y100 K15



Leaf Green

Hex: #8ec03d

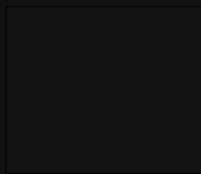
CMYK: C52 M0 Y90 K0



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Brand colors

- Kissa can be used as a background color for some elements. It must also be used as a text color if the background is gray (Toolbox for example).
- Gandalf is meant to be used as a text color if the background is light (Steven Seagull).
- Steven Seagull is a main background color for everything in FreeNest. It can be also used as a text color if the background is dark (Kissa for example).



Kissa

Hex: #1a1a1a

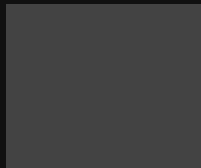
CMYK: C76 M67 Y0 K0



Steven Seagull

Hex: #fafafc

CMYK: C2 M2 Y1 K0



Gandalf

Hex: #454545

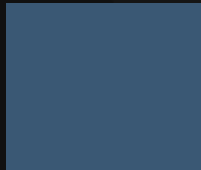
CMYK: C65 M55 Y52 K53



Free**Nest**

Brand colors

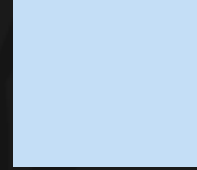
- Sad Cloud, Happy Cloud and Hazy Morning are meant to be used for other visual elements in layouts, buttons, images, illustrations etc. Use them carefully, do not let the blue shades dominate the green shades!



Sad Cloud

Hex: #3b5975

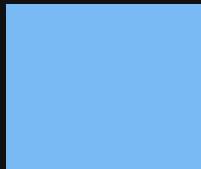
CMYK: C81 M57 Y34 K21



Hazy Morning

Hex: #c5dff7

CMYK: C26 M6 Y0 K0



Happy Cloud

Hex: #7abaf5

CMYK: C53 M16 Y0 K0



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Web colors

- Great success, Doing It Wrong and Fatal error are utility colors. They are used to give feedback for the user. Great Success means that everything's good. Doing It Wrong is a notice colour for noticing the user. Fatal Error is used for errors.



Great Success
Hex: #7fb34b



Fatal Error
Hex: #ad2a20

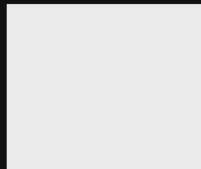


Doing It Wrong
Hex: #ffc30f

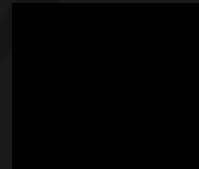


Web colors

- 666 is the darkest shade you can use anywhere. 666 is near black. If there is necessary to use black, this color is the one.
- Toolbox and Team Board are used as a background for some elements (a toolbox or web site element background for example).



Toolbox
Hex: #ebebeb



666
Hex: #060606



Team Board
Hex: #c8c8c8



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Typography

The Roboto family

- The brand font is called Roboto. Always maintain the consistency in FreeNest software, web media, print media etc! If it's not possible to use Roboto in web, use Arial.

Roboto Condensed, *Roboto Condensed Italic*

Roboto Bold Condensed, *Roboto Bold Condensed Italic*

Roboto Thin, *Roboto Thin Italic*

Roboto Light, *Roboto Light Italic*

Roboto Regular, *Roboto Regular Italic*

Roboto Bold, *Roboto Bold Italic*

Roboto Black, *Roboto Black Italic*



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Typography

Using Roboto

- In body text you should use Thin or Light. Light can be used if Thin gets too thin and stuffy. This text is written with Roboto Light. For highlighting etc. you can use Bold or Black. Never use Italic for anything else than just short quotations and such. See the text colors in the Colors section to select right color for the right background when writing text.

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(Roboto Thin and Roboto Black)



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