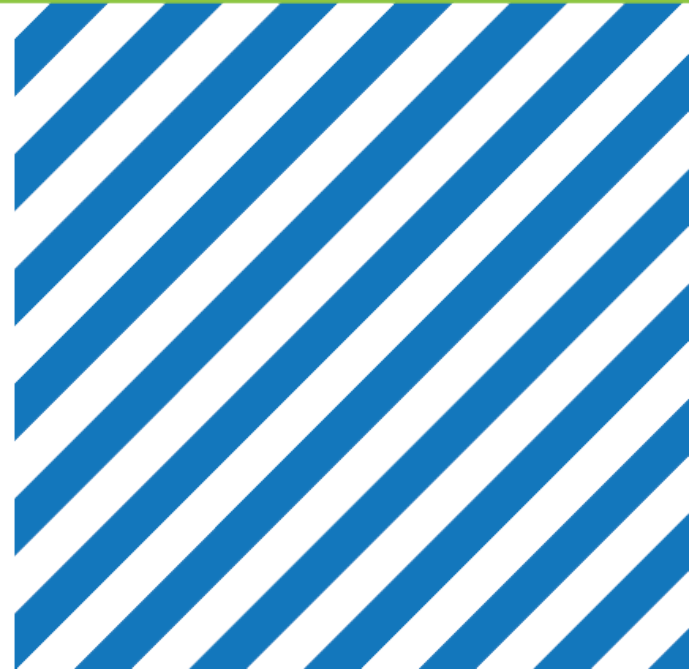


M8 – DESPLIEGUE DE APLICACIONES WEB

Documentación y Sistemas de Control de Versiones



Innovación
en Formación
Profesional

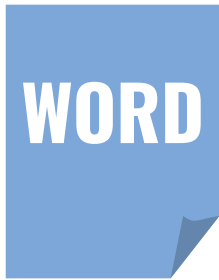


DOCUMENTACIÓN

La **documentación detallada sobre las especificaciones del programa** es una práctica obligatoria para todo desarrollador de software



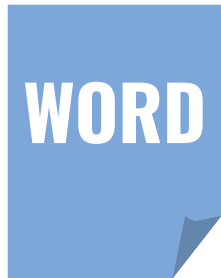
Formatos estándar



Formatos estándar



Formatos estándar



Los **formatos web** son
cada vez más habituales

Lenguajes de marcas para la documentación

Los lenguajes de marcas consisten en etiquetas (tags) que se utilizan para estructurar la información. Ejemplo HTML, XML

Normalmente para elaborar documentación se usa el lenguaje **XML**



Ejemplo de marcado con XML

XML

```
<?xml version="1.0"?>
<xs:schema xmlns:xs="http://www.w3.org/2001/XMLSchema">

  <xs:element name="libro">
    <xs:complexType>
      <xs:sequence>
        <xs:element name="titulo" type="xs:string"/>
        <xs:element name="autores" type="xs:string"/>
        <xs:element name="editorial" type="xs:string"/>
      </xs:sequence>
    </xs:complexType>
  </xs:element>

</xs:schema>
```


▶ **Especificaciones funcionales**

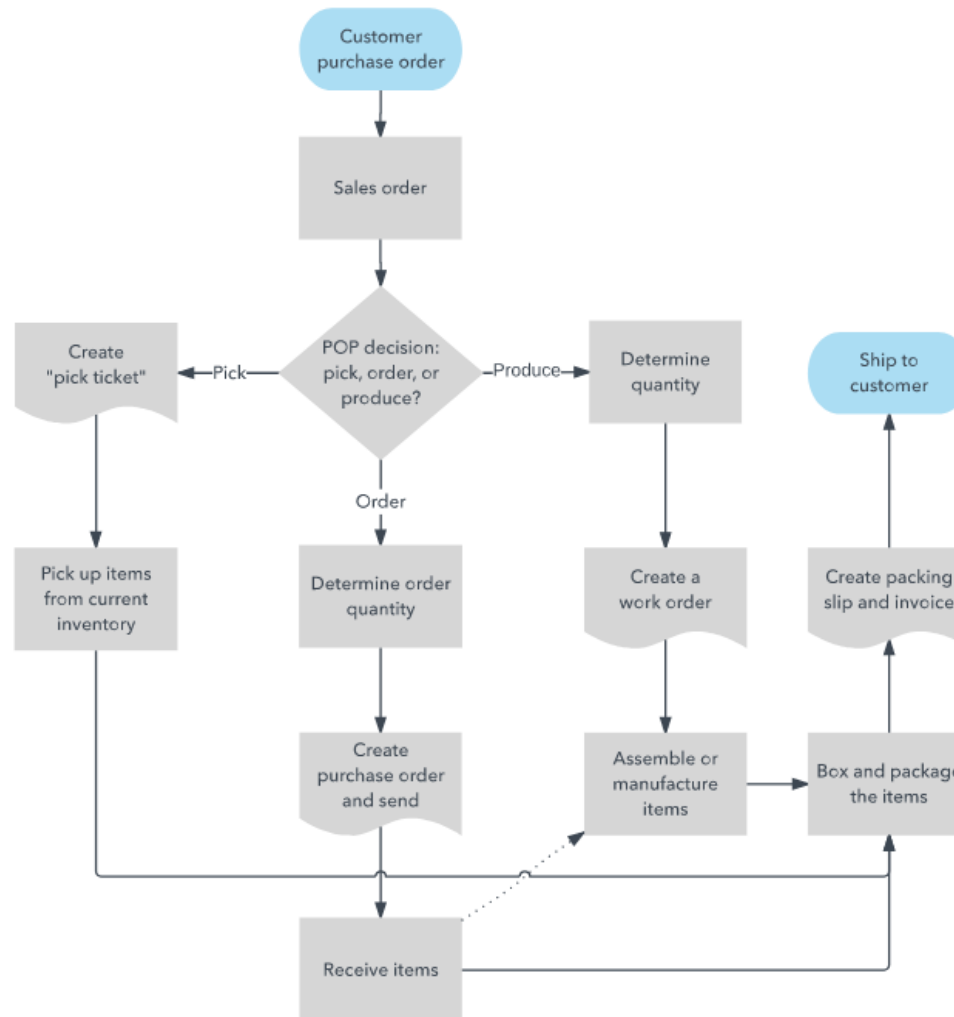
- ▷ Especificar entradas y salidas
- ▷ Las secciones de la interfaz y recursos para su correcta utilización
- ▷ Información referente al mantenimiento y/o actualizaciones
- ▷ Suele usarse para elaborar el manual de usuario

▶ **Diseño del sistema**

- ▷ Información necesaria para conocer el sistema
- ▷ Diagrama de flujo que muestre de manera gráfica el comportamiento
- ▷ Diagrama entidad-relación para la estructura de la base de datos

Apartados que debe tener la documentación

Ejemplo diagrama de flujo



▶ **Prueba de programas y sistemas**

- ▷ Se describe el comportamiento del programa
- ▷ Se especifica las excepciones a la hora de ejecutar el programa, por ejemplo si existe un error con la conexión o se intenta acceder a un archivo que no encuentra

Javadoc

Genera automáticamente
documentación en **HTML** para
aplicaciones **Java**

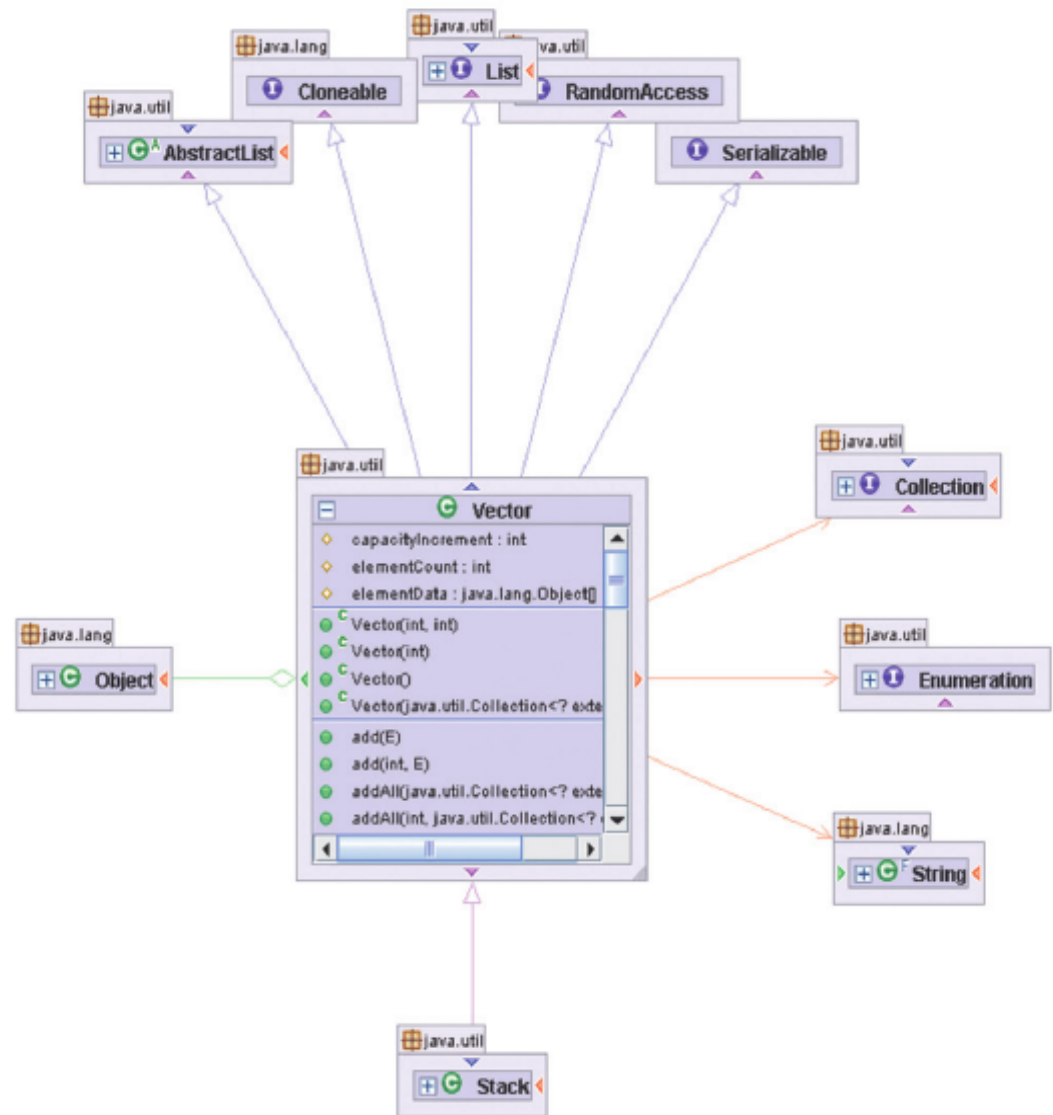


Diagrama UML de una clase en Java

Doxygen

Genera automáticamente documentación para aplicaciones **Java, C/C++, Python, Objective-C, PHP, C#, D**



The screenshot shows the Doxygen website interface. At the top is a blue header with the 'Doxygen' logo on the left, social media icons in the center, and a 'Donate' button and currency selector (€ (EUR)) on the right. Below the header is a navigation bar with links: Home, Downloads, Documentation, Extensions, and Support. A left sidebar contains a tree view for 'Doxygen' with sub-links: About, Downloads, Changelog, Documentation, Get Involved, Wish list, Examples, Links, Extensions, Support, Report bugs, and Donate. The main content area is titled 'Doxygen' and contains the following text:

Generate documentation from source code

Doxygen is the de facto standard tool for generating documentation from annotated C++ sources, but it also supports other popular programming languages such as C, Objective-C, C#, PHP, Java, Python, IDL (Corba, Microsoft, and UNO/OpenOffice flavors), Fortran, VHDL, Tcl, and to some extent D.

Doxygen can help you in three ways:

1. It can generate an on-line documentation browser (in HTML) and/or an off-line reference manual (in \LaTeX) from a set of documented source files. There is also support for generating output in RTF (MS-Word), PostScript, hyperlinked PDF, compressed HTML, and Unix man pages. The documentation is extracted directly from the sources, which makes it much easier to keep the documentation consistent with the source code.
2. You can [configure](#) doxygen to extract the code structure from undocumented source files. This is very useful to quickly find your way in large source distributions. Doxygen can also visualize the relations between the various elements by means of include dependency graphs, inheritance diagrams, and collaboration diagrams, which are all generated automatically.
3. You can also use doxygen for creating normal documentation (as I did for the doxygen user manual and web-site).

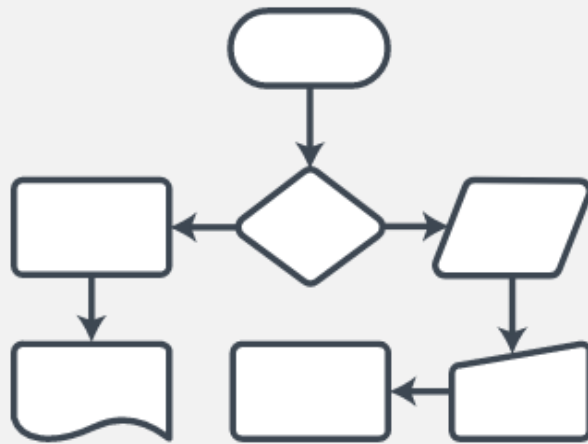
Doxygen is developed under Mac OS X and Linux, but is set-up to be highly portable. As a result, it runs on most other Unix flavors as well. Furthermore, executables for Windows are available.

Doxygen license

Copyright © 1997-2016 by [Dimitri van Heesch](#).

Permission to use, copy, modify, and distribute this software and its documentation under the terms of the GNU General Public License is hereby granted. No representations are made about the suitability of this software for any purpose. It is provided "as is" without express or implied warranty. See the [GNU General Public License](#) for more details.

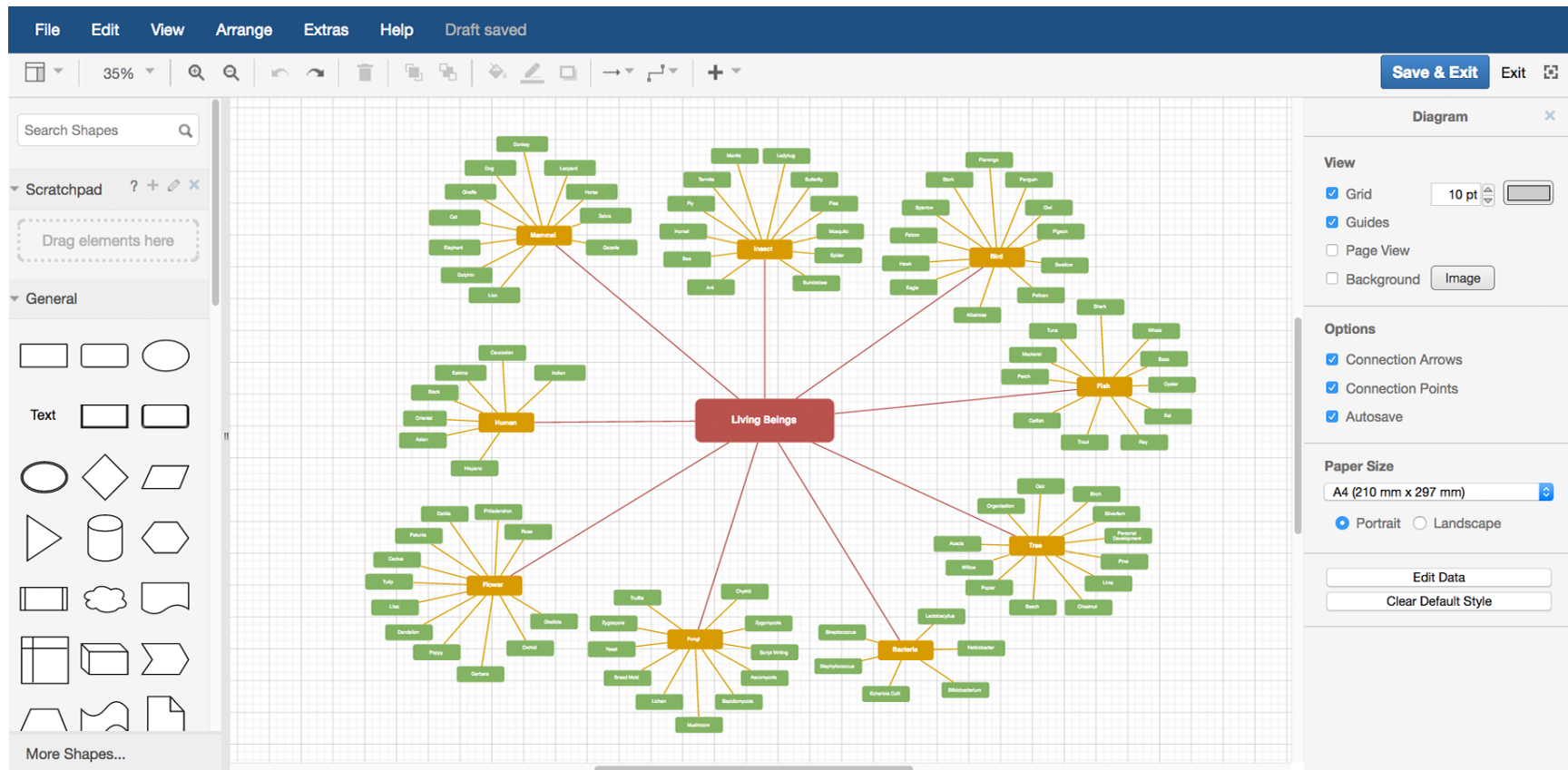
Generated on Tue Jan 30 2018 21:07:54 for Doxygen by [doxygen](#) 1.8.15



Otras herramientas para
diagramas

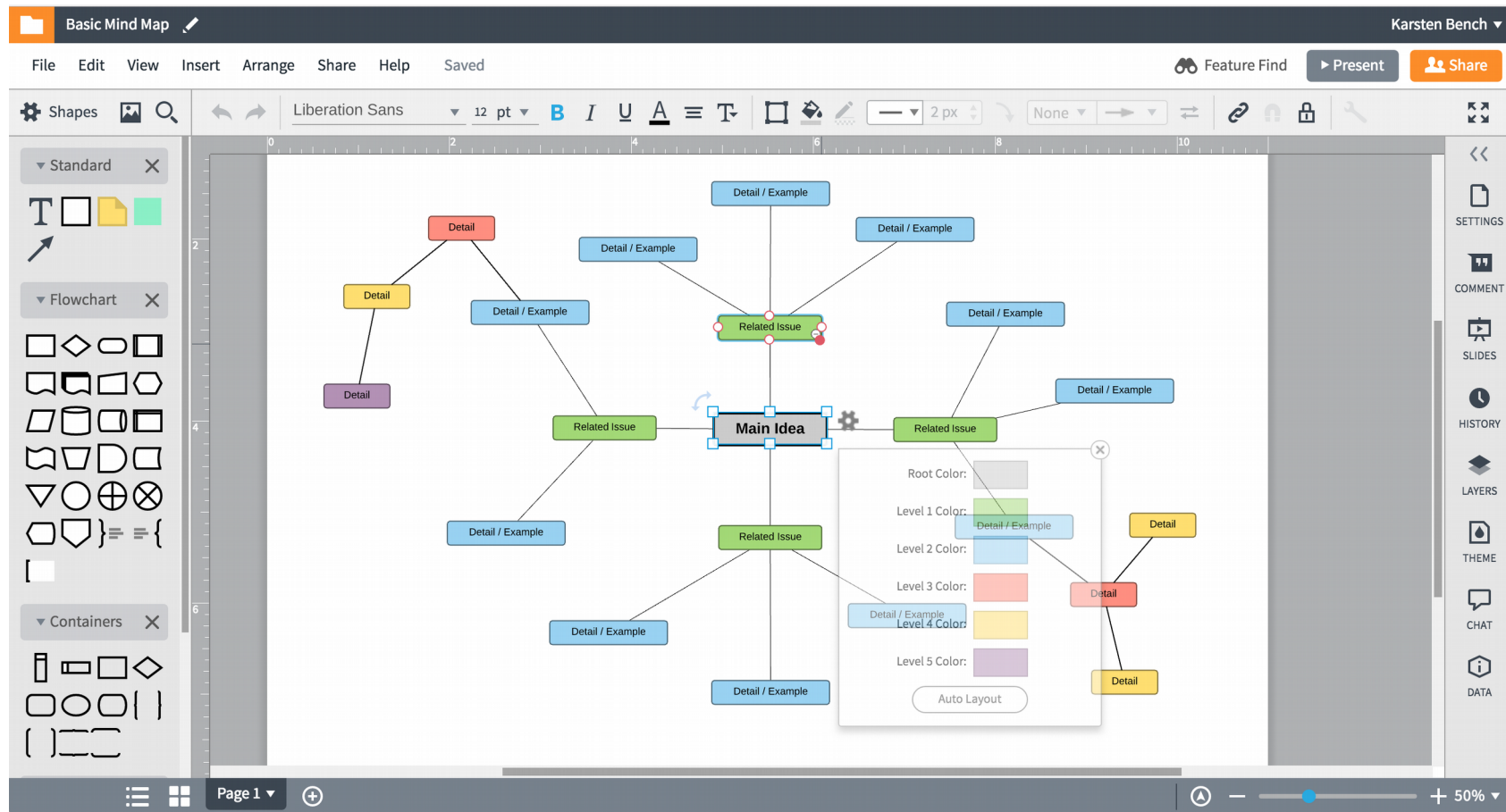
draw.io <https://www.draw.io/>

Gratis, online y escritorio, Mac, Windows, Linux



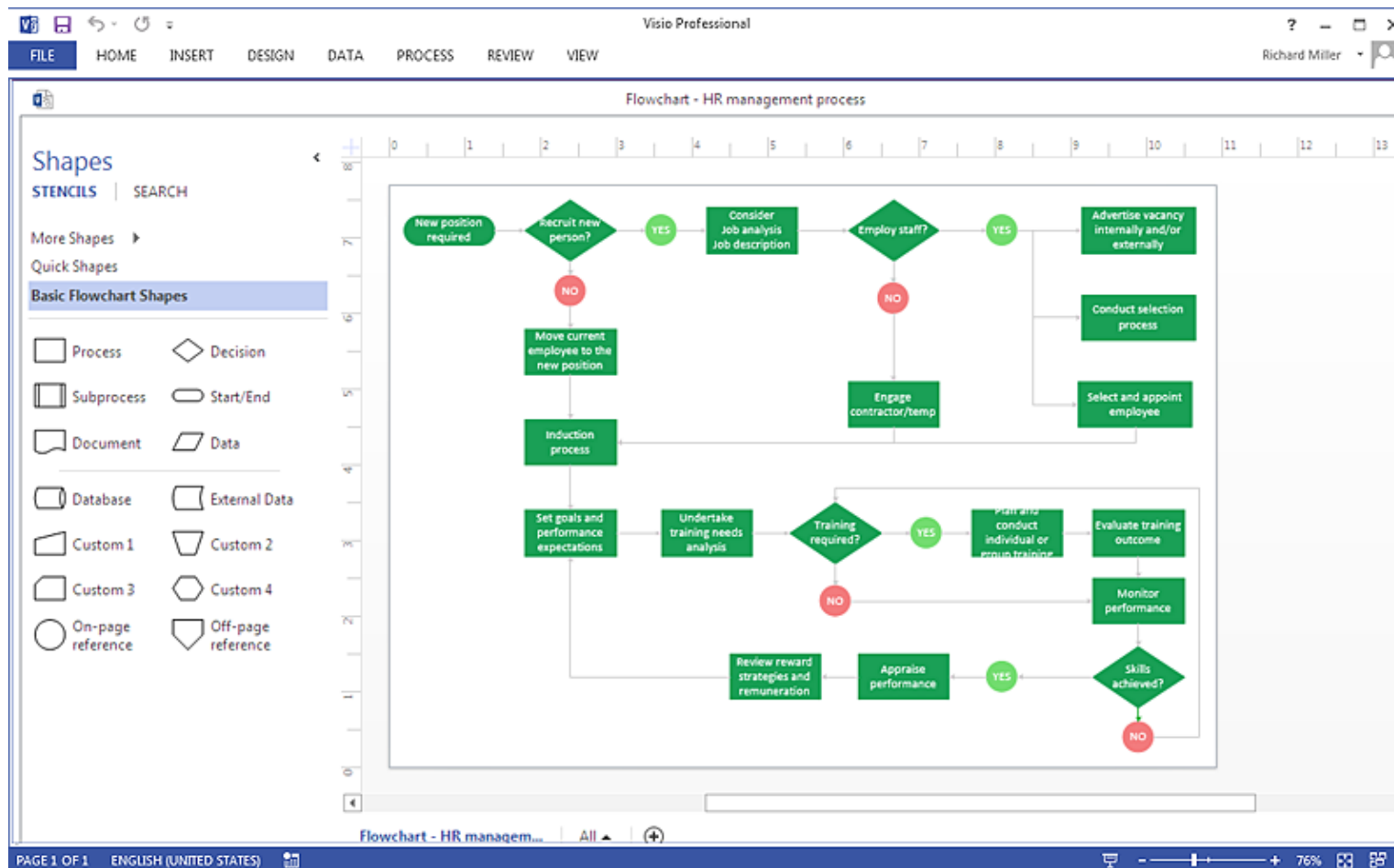
lucidchart <https://www.lucidchart.com>

De pago con opción Gratis (*con limitaciones*), online



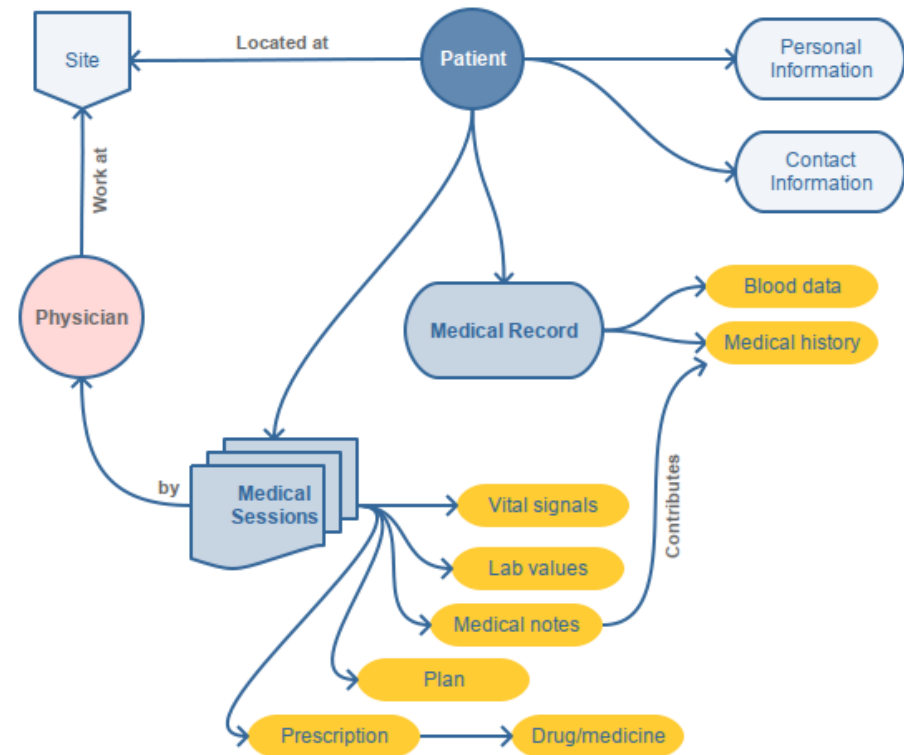
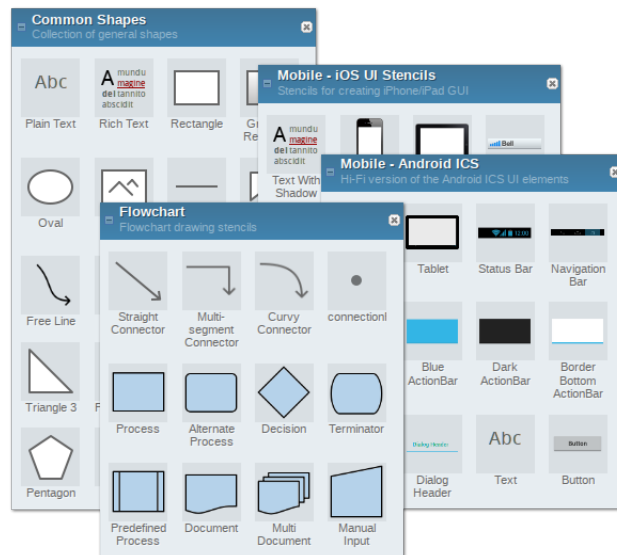
Microsoft Visio <https://www.microsoft.com>

De pago, Windows

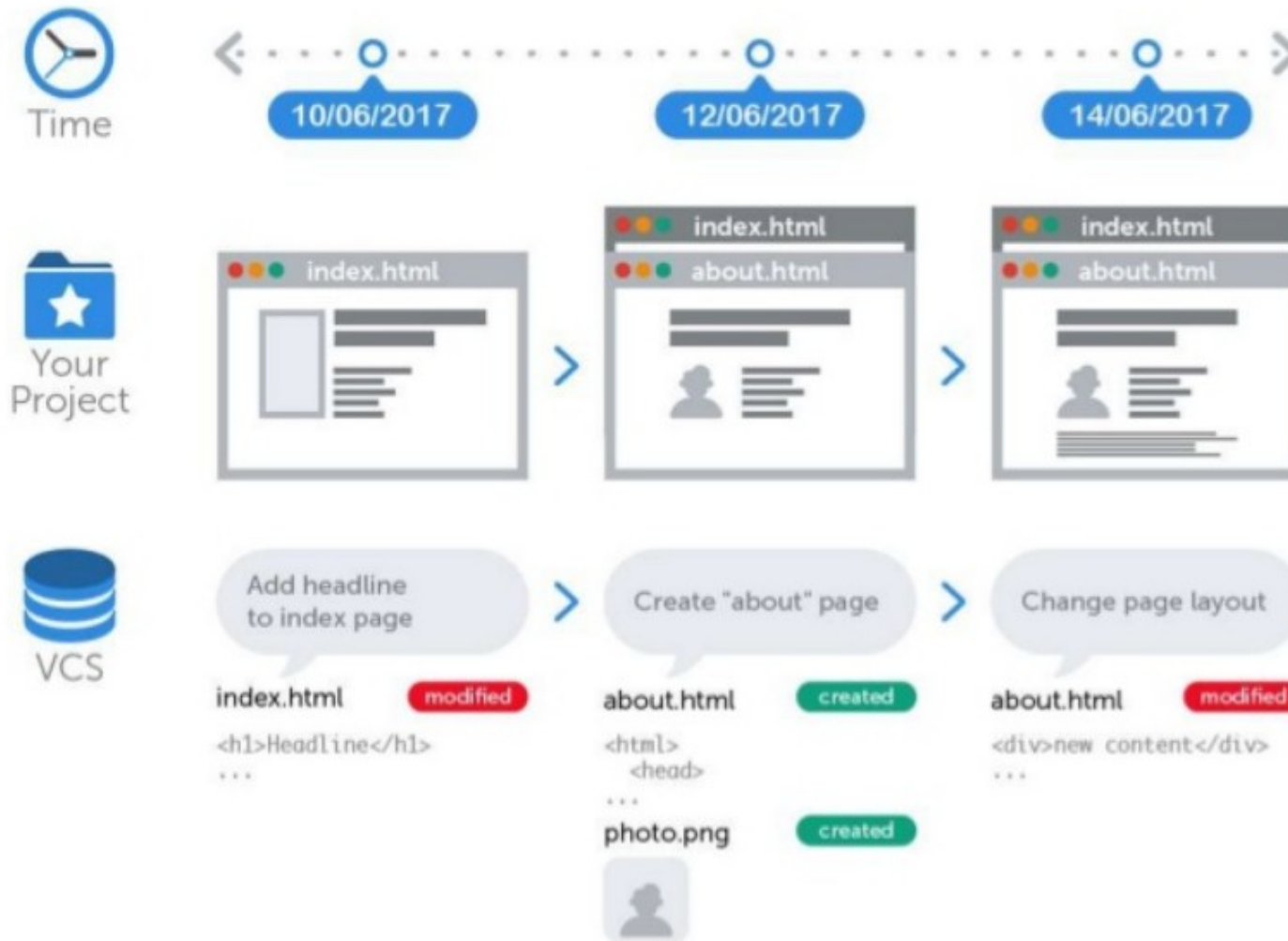


pencil <https://pencil.evolus.vn/>

Gratis, opensource, escritorio, Mac, Windows, Linux



SISTEMAS DE CONTROL DE VERSIONES



Las modificaciones realizadas en una aplicación, se denominan **versiones** y se identifican mediante un código numérico (v1.0).

Es aconsejable tener un control de los cambios del software. Este tipo de sistemas se denomina **sistema de control de versiones**



Es una aplicación que ofrece

- ▶ Mecanismos para gestionar las diferentes **versiones** de uno más archivos
- ▶ **Evita la pérdida** de contenidos una vez registrado
- ▶ Permite **recuperar** cualquier versión una vez grabada y crear otras nuevas a partir de éstas
- ▶ **Gestionar** problemas, en qué momento se crearon y quien lo hizo

Es una aplicación que ofrece

- ▶ **Comparar** diferentes versiones de un archivo
- ▶ Comprobar si una determinada modificación puede ser útil **sin que la prueba afecte al resto** de la aplicación
- ▶ Mantener **varias ramas** de un proyecto
- ▶ **Conexión segura y cifrada** con el servidor, para la seguridad de los datos enviados

¿ Para quien es útil ?

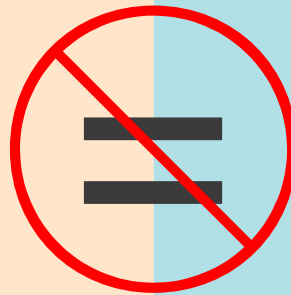
- ▶ Para **investigadores**: Artículos, Tesis, Notas (LaTeX)
- ▶ Para **administradores**: Archivos de configuración, ...
- ▶ Para **desarrolladores**: códigos fuente, páginas web,...
- ▶ Para **escritores**: cuentos, libros, ...
- ▶ ...



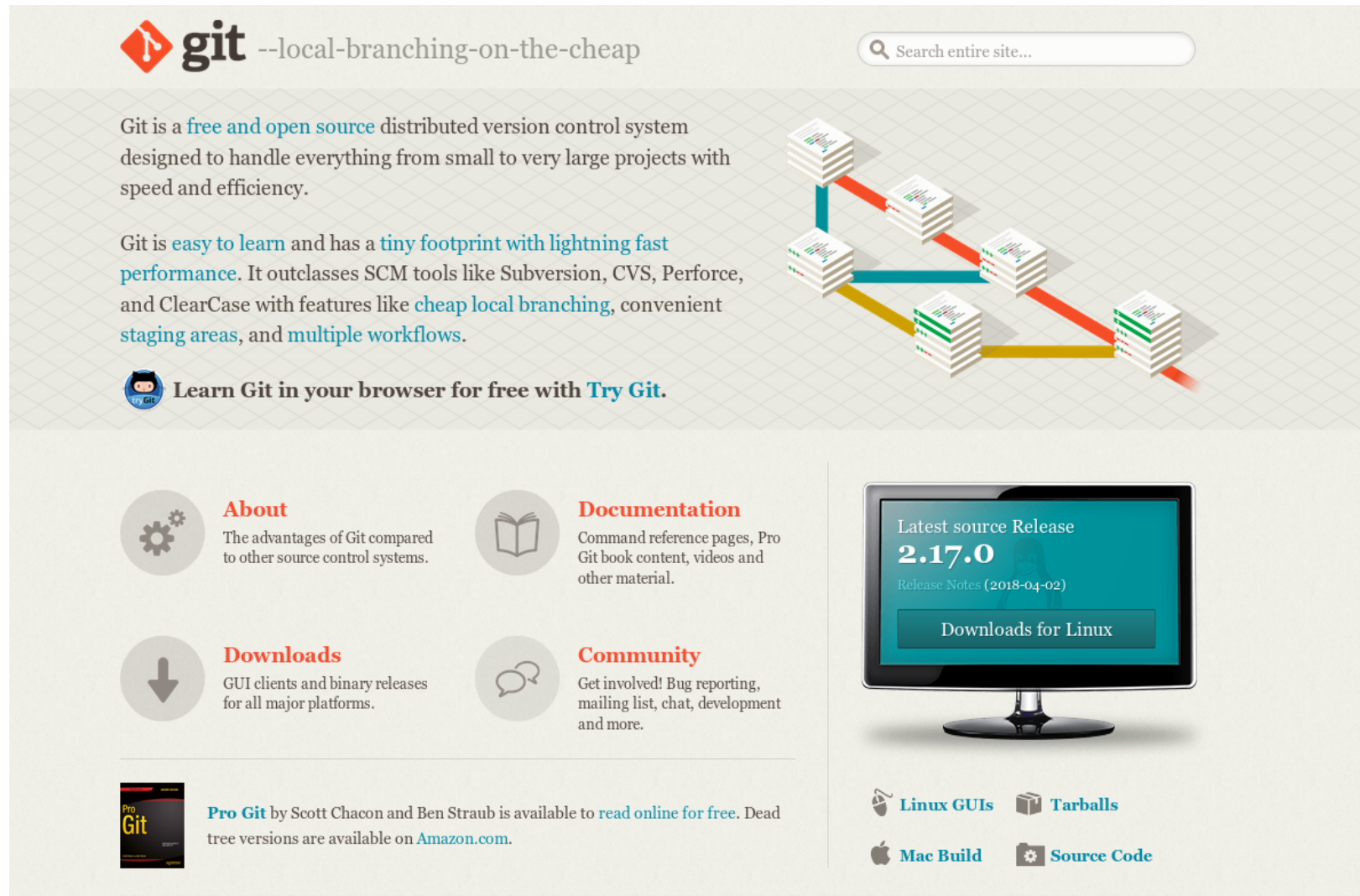
Sistema de control de versiones

Diseñado por Linus Torvalds

- ▶ Gratis y OpenSource
- ▶ Velocidad
- ▶ Diseño sencillo
- ▶ Distribuido
- ▶ Manejar grandes proyectos (Kernel de Linux)
- ▶ Eficiente



<https://git-scm.com/>



The screenshot shows the Git website homepage. At the top left is the Git logo and the tagline "--local-branching-on-the-cheap". To the right is a search bar. The main content area describes Git as a free and open source distributed version control system. It highlights features like being easy to learn, having a tiny footprint, and supporting cheap local branching. Below this is a "Try Git" button. The bottom section contains four links: About, Documentation, Downloads, and Community, each with an icon and a brief description. On the right side, there is a monitor displaying the latest source release (2.17.0) and a button for Linux downloads. At the bottom right, there are links for Linux GUIs, Tarballs, Mac Build, and Source Code.

git --local-branching-on-the-cheap

Search entire site...

Git is a **free and open source** distributed version control system designed to handle everything from small to very large projects with speed and efficiency.

Git is **easy to learn** and has a **tiny footprint with lightning fast performance**. It outclasses SCM tools like Subversion, CVS, Perforce, and ClearCase with features like **cheap local branching**, convenient **staging areas**, and **multiple workflows**.

Learn Git in your browser for free with Try Git.

About
The advantages of Git compared to other source control systems.

Documentation
Command reference pages, Pro Git book content, videos and other material.

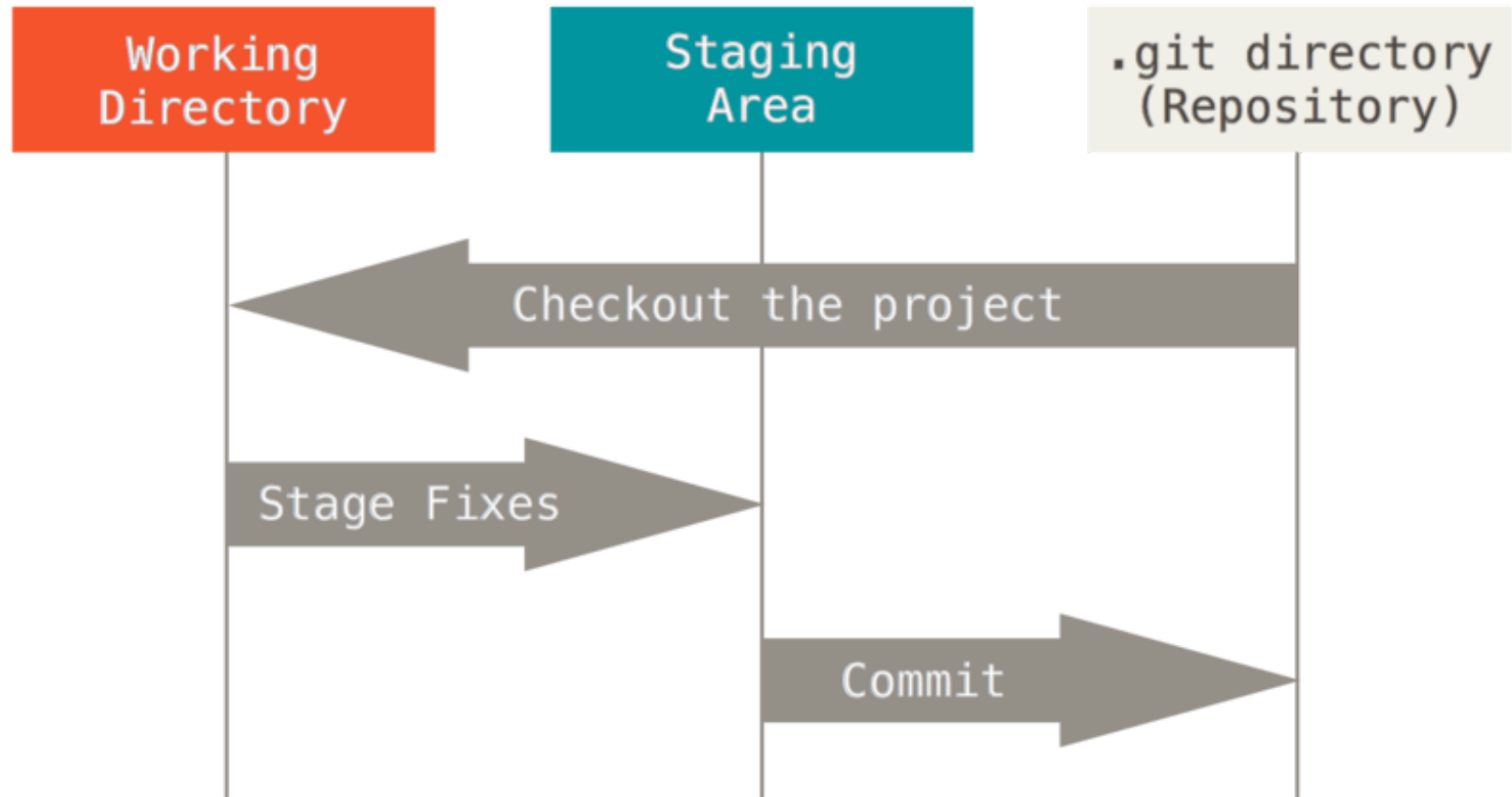
Downloads
GUI clients and binary releases for all major platforms.

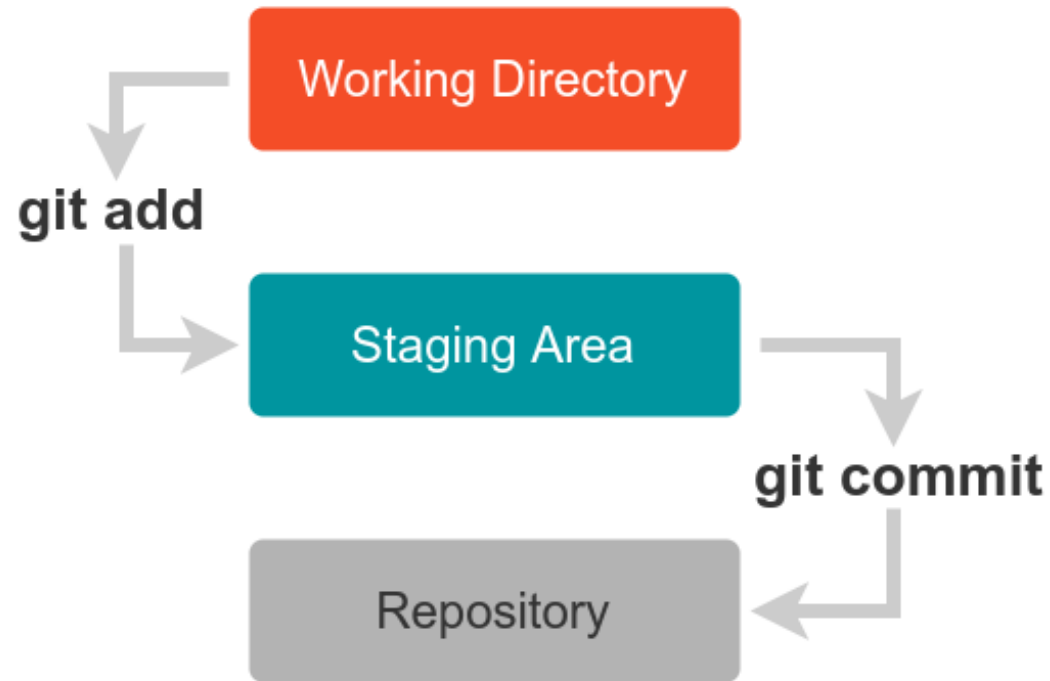
Community
Get involved! Bug reporting, mailing list, chat, development and more.

Latest source Release
2.17.0
Release Notes (2018-04-02)
Downloads for Linux

Pro Git by Scott Chacon and Ben Straub is available to [read online for free](#). Dead tree versions are available on [Amazon.com](#).

Linux GUIs **Tarballs**
Mac Build **Source Code**



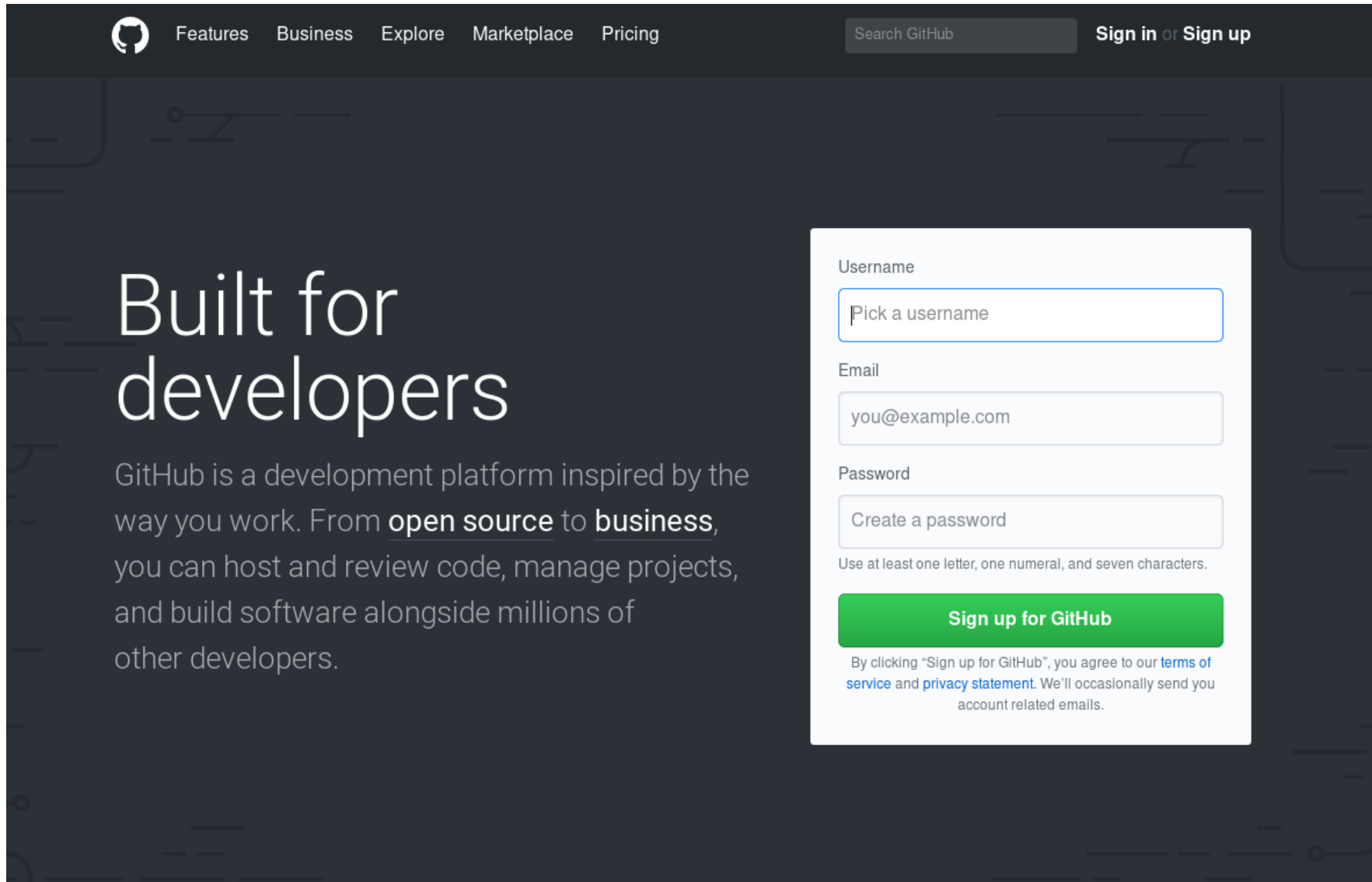


Descripción	Comando
Configurar nombre y email del autor	git config --global user.name "Joan Nelson" git config --global user.email joan@demo.com
Inicia repositorio local	git init
Crea copia en directorio local	git clone /path/to/repository
Agrega uno o más archivos a Staging	git add <filename> git add *
Agregar al repositorio	git commit -m "Commit message"
Ver estado de los archivos	git status
Listar ramas	git branch
Cambiar de rama	git checkout <branchname>
Ver los commits	git log

Descripción	Comando
Ver los commits (abreviado)	git log --oneline
Conectarse a repositorio remoto y etiquetarlo "remotelabel"	git remote add remotelabel <server>
Ver repositorios remotos	git remote -v
Enviar rama a repositorio remoto "remotelabel"	git push remotelabel <branchname>
Enviar todas las ramas a remoto	git push --all origin
Borrar rama en repositorio remoto "remotelabel"	git push remotelabel :<branchname>
Agregar cambios de repositorio remoto a local	git pull



`https://github.com/`



The screenshot shows the GitHub homepage with a dark background. On the left, the text "Built for developers" is prominently displayed. Below it, a paragraph describes GitHub as a development platform. On the right, a white sign-up form is overlaid. The form includes fields for Username, Email, and Password, each with a placeholder text. Below the Password field, there is a note about password requirements. A green "Sign up for GitHub" button is at the bottom of the form. Below the button, a small disclaimer states that by signing up, the user agrees to the terms of service and privacy statement.

Features Business Explore Marketplace Pricing Search GitHub Sign in or Sign up

Built for developers

GitHub is a development platform inspired by the way you work. From **open source** to **business**, you can host and review code, manage projects, and build software alongside millions of other developers.


Username
Pick a username

Email
you@example.com




Password
Create a password
Use at least one letter, one numeral, and seven characters.

Sign up for GitHub

By clicking "Sign up for GitHub", you agree to our [terms of service](#) and [privacy statement](#). We'll occasionally send you account related emails.



[Pull requests](#)
[Issues](#)
[Marketplace](#)
[Explore](#)



fidgg

Add a bio

Edit profile

🕒 Joined 2 days ago

ProTip! Updating your profile with your name, location, and a profile picture helps other GitHub users get to know you.

[Edit profile](#) ✕

Overview Repositories **1** Stars **0** Followers **0** Following **0**

Popular repositories

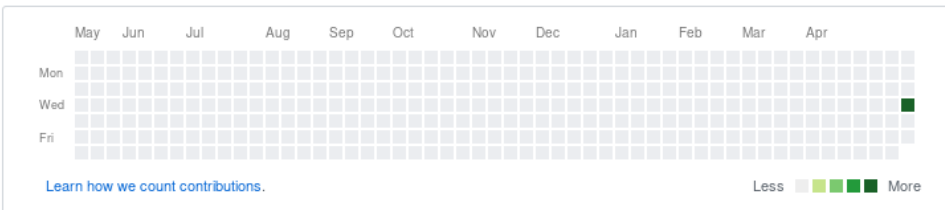
Customize your pinned repositories

test

● HTML

2 contributions in the last year

Contribution settings ▾



Contribution activity

Jump to ▾

2018


May 2018





Created their first repository

May 16




 This repository

 Pull requests
 Issues
 Marketplace
 Explore
 
 +
 

fidgg / test

Watch 0
 Star 0
 Fork 0





<> Code
 Issues 0
 Pull requests 0
 Projects 0
 Wiki
 Insights
 Settings

No description, website, or topics provided. [Edit](#)


[Add topics](#)

2 commits
 1 branch
 0 releases
 0 contributors

Branch: master
 New pull request
 Create new file
 Upload files
 Find file
 Clone or download

 minombre	modificado style	Latest commit 3cac4f1 2 days ago
 app.js	mi primer commit	2 days ago
 index.html	mi primer commit	2 days ago
 style.css	modificado style	2 days ago

Help people interested in this repository understand your project by adding a README.
 [Add a README](#)

© 2018 GitHub, Inc.
 [Terms](#)
[Privacy](#)
[Security](#)
[Status](#)
[Help](#)

[Contact GitHub](#)
[API](#)
[Training](#)
[Shop](#)
[Blog](#)
[About](#)



*La mejor forma de aprender es “haciendo”.
Educación y empresas forman un binomio inseparable*