

Organiza:



Patrocina:



San Cristóbal de La Laguna.  
/ 22 y 23 de mayo de 2017



# Integración de las herramientas de “Github Education” en el aula

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**8<sup>a</sup>** Jornadas de  
**Innovación Educativa**  
de la Universidad de La Laguna



# ¿Qué es GitHub?

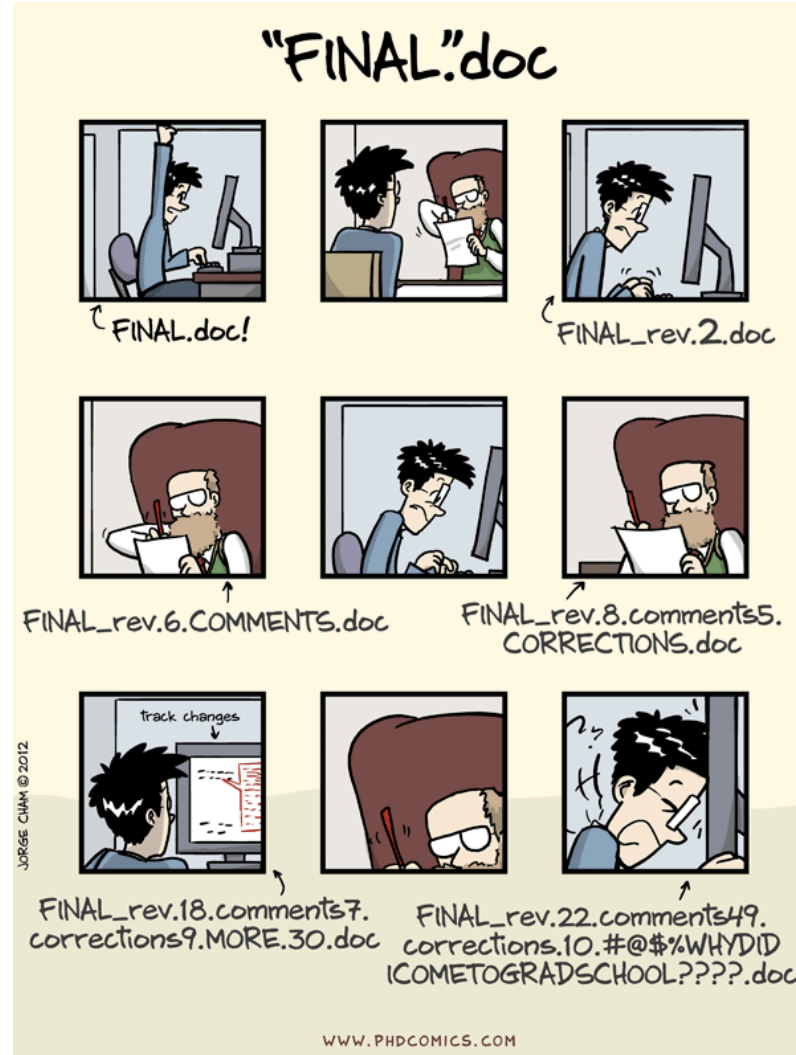


**GitHub es una plataforma que permite el alojamiento y desarrollo de proyectos**

- Provee Control de Versiones
- Mecanismos de Colaboración

Nos permite trabajar colaborativamente en los proyectos desde cualquier sitio

Git y GitHub proveen Control de Versiones



# Ejemplo: Elaboración de los apuntes de una asignatura

Escribe para buscar

- Introduction
- Angular
- APIs de JS
- Audio y Video en JS
- Babel ES6, ES7 y ES8
  - 1. Proceso de Introducción de Nuev...
  - 2. Babel
  - 3. Funciones Flecha
  - 4. Deconstrucciones
  - 5. Operador de Dispersión
  - 6. Iteradores
  - 7. Nueva sintaxis en bucles for
  - 8. Operador bind
  - 9. Import
  - 10. Export
  - 11. Async y Await
  - 12. Integración de Babel con Gulp

## 4. Deconstrucciones

La asignación por deconstrucción es una expresión que nos permite extraer datos de Arrays u Objetos.

### Uso con objetos

Para usarlo con objetos necesitamos indicar los nombres de las claves que queremos extraer.

```
function login (username, password) {
  // Hacer cosas
  console.log(username)
  console.log(password)
}

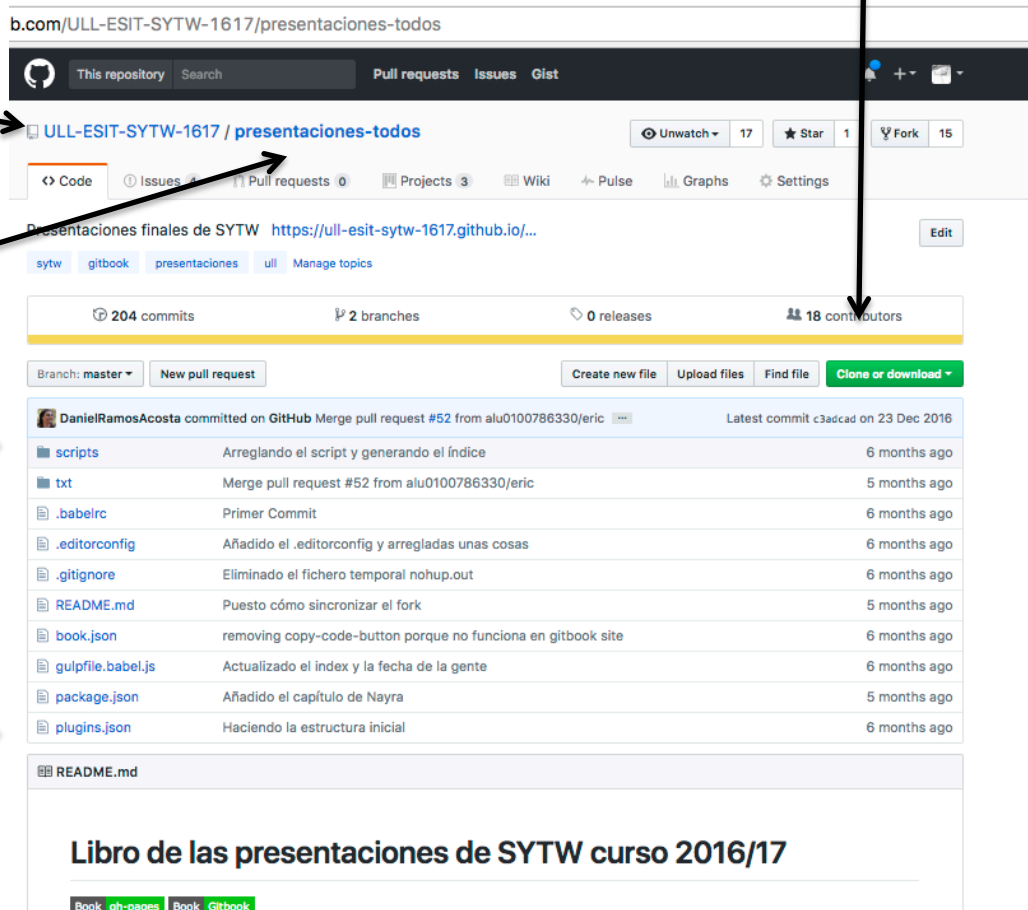
let argv = {
  username: 'Pepe',
  password: 'Patata'
  // Y otras cosas
}

let { username, password } = argv
```

<https://ull-esit-sytw-1617.github.io/presentaciones-todos/>

# Ejemplo: Elaboración de unos apuntes (18 alumnos colaborando)

Organización GitHub  
ULL-ESIT-SYTW-1617



Nombre del repositorio:  
Presentaciones-todos

Ficheros y directorios  
Del proyecto

<https://github.com/ULL-ESIT-SYTW-1617/presentaciones-todos>

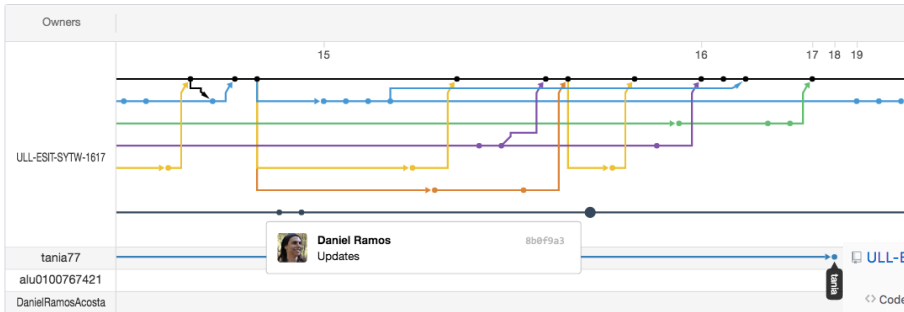
# Ejemplo: Elaboración de apuntes (Estadísticas de Seguimiento)

ULL-ESIT-SYTW-1617 / presentaciones-todos

Unwatch 17 Star 1 Fork 15

Code Issues 4 Pull requests 0 Projects 3 Wiki Pulse Graphs Settings

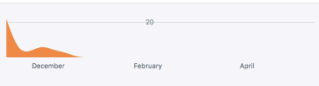
- Contributors
- Traffic
- Commits
- Code frequency
- Punch card
- Network**
- Members
- Dependents



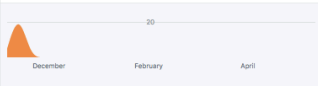
Nov 13, 2016 – May 15, 2017  
Contributions to master, excluding merge commits



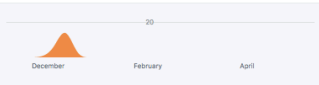
**DanielRamosAcosta** #1  
42 commits | 2,707 ++ | 1,821 --



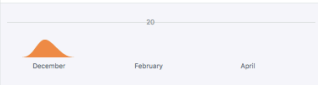
**alu0100505078** #2  
32 commits | 499 ++ | 127 --



**alu0100762846** #3  
24 commits | 1,822 ++ | 1,696 --



**joshuape** #4  
20 commits | 5,162 ++ | 4,590 --



ULL-ESIT-SYTW-1617 / presentaciones-todos

Code Issues 4 Pull requests 0 Projects 3 Wiki Pulse Graphs Settings

History for presentaciones-todos / README.md

- Commits on Dec 9, 2016
  - Puesto cómo sincronizar el fork  
DanielRamosAcosta committed on 9 Dec 2016
- Commits on Nov 28, 2016
  - Añadida fecha de Semanal  
Batebarera committed on 28 Nov 2016
- Commits on Nov 25, 2016
  - Pasado el link y añadidos los enlaces a las presentaciones  
DanielRamosAcosta committed on 25 Nov 2016
- Commits on Nov 23, 2016
  - Arreglando la tabla del README.md  
DanielRamosAcosta committed on 23 Nov 2016
  - Actualizado el index y la fecha de la gente  
DanielRamosAcosta committed on 23 Nov 2016
- Commits on Nov 17, 2016
  - fecha presentación Mercuris  
alu0100538690 committed on 17 Nov 2016
- Commits on Nov 15, 2016

ULL-ESIT-SYTW-1617 / presentaciones-todos

Unwatch 17 Star 1 Fork 15

Code Issues 4 Pull requests 0 Projects 3 Wiki Pulse Graphs Settings

Filters is:issue is:closed Labels Milestones New issue

Clear current search query, filters, and sorts

4 Open 19 Closed

- Dependencia** **bug**  
#29 by alu0100406122 was closed on 9 Dec 2016 setup
- Audio y Vídeo en JS** **escribir capítulo**  
#28 by DanielRamosAcosta was closed on 9 Dec 2016 book
- Shopify** **escribir capítulo**  
#22 by DanielRamosAcosta was closed on 17 Dec 2016 book
- React** **escribir capítulo**  
#21 by DanielRamosAcosta was closed on 22 Dec 2016 book
- Polymer** **escribir capítulo**  
#20 by DanielRamosAcosta was closed on 27 Nov 2016 book
- Parallax v Materialize 2** **escribir capítulo**

<https://github.com/ULL-ESIT-SYTW-1617/presentaciones-todos>

# GitHub Education en 6 pasos

1. Tanto profesores como alumnos deben registrarse en GitHub
2. El profesor, cada curso crea una **organización** para cada clase que imparte
3. Asociada a cada organización crea un **aula** en **GitHub Classroom**
4. Solicita a GitHub **repositorios privados** para la organización
5. Crea tareas utilizando el **aula Classroom**. Cada tarea (**asignación**) tiene un enlace asociado
6. Publica el enlace a la tarea en el Campus Virtual



# Registrarse en GitHub

<https://github.com>

Usa el email institucional

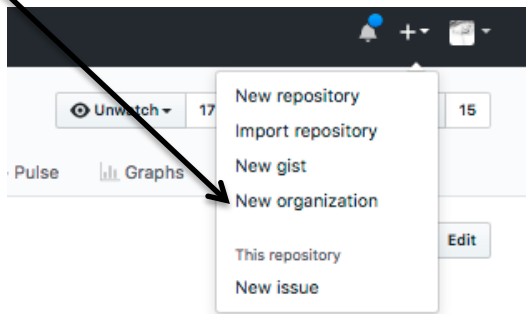
usuario@ull.edu.es

The screenshot shows the GitHub sign-up interface. It features three input fields: 'Username' with a placeholder 'Pick a username', 'Email' with a placeholder 'Your email address', and 'Password' with a placeholder 'Create a password'. Below the password field is a note: 'Use at least one letter, one numeral, and seven characters.' A prominent green button labeled 'Sign up for GitHub' is positioned below the form. At the bottom, a line of text states: 'By clicking "Sign up for GitHub", you agree to our [terms of service](#) and [privacy policy](#). We'll occasionally send you account related emails.'



# Cada curso lectivo crea una organización para cada clase

Click!



## Sign up your team

<p>✓ <b>Completed</b> Create personal account</p>	<p><b>Step 2:</b> Create organization</p>
---	---

### Create an organization account

**Organization name**

The organization account will live at <https://github.com/>

**Billing email**

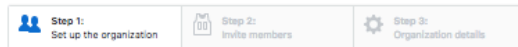
Receipts will be sent here

### Choose your plan

<p><input checked="" type="radio"/> <b>Free</b> Unlimited users and public repositories</p>	\$0
---	-----

# Cada curso lectivo crea una organización para cada clase

## Sign up your team



### Create an organization account

Organization name

The organization account will live at <https://github.com/ULL-ESIT-GRADO-ASIGNAME>

Billing email

Receipts will be sent here

Organization accounts allow your team to plan, build, review, and ship software — all while tracking bugs and discussing ideas.

### Choose your plan

Free \$0  
 Unlimited users and public repositories

Team \$9 per user / month  
 Starts at \$38 / month which includes your first 5 users.  
 Unlimited public repositories  
 Unlimited private repositories

Business \$21 per user / month  
 Includes everything in the Team plan, plus:  
 SAML based single sign-on (SSO)  
 99.95% Guaranteed uptime SLA  
 24/5 email support with < 8 hour response time  
 Need help getting started or on-premises hosting? Contact us.

The credit card and plan you choose will be billed to the organization — not susana.rodriguez.leon (your user account).

This account is owned by a business (see the [Corporate Terms of Service](#) for details)

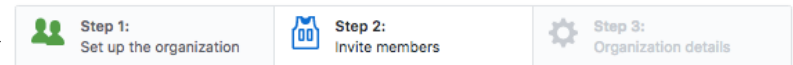
By clicking on "Create organization" below, you are agreeing to the [Terms of Service](#) and the [Privacy Policy](#).

Create organization

Click!



## Invite organization members



Search by username, full name or email address

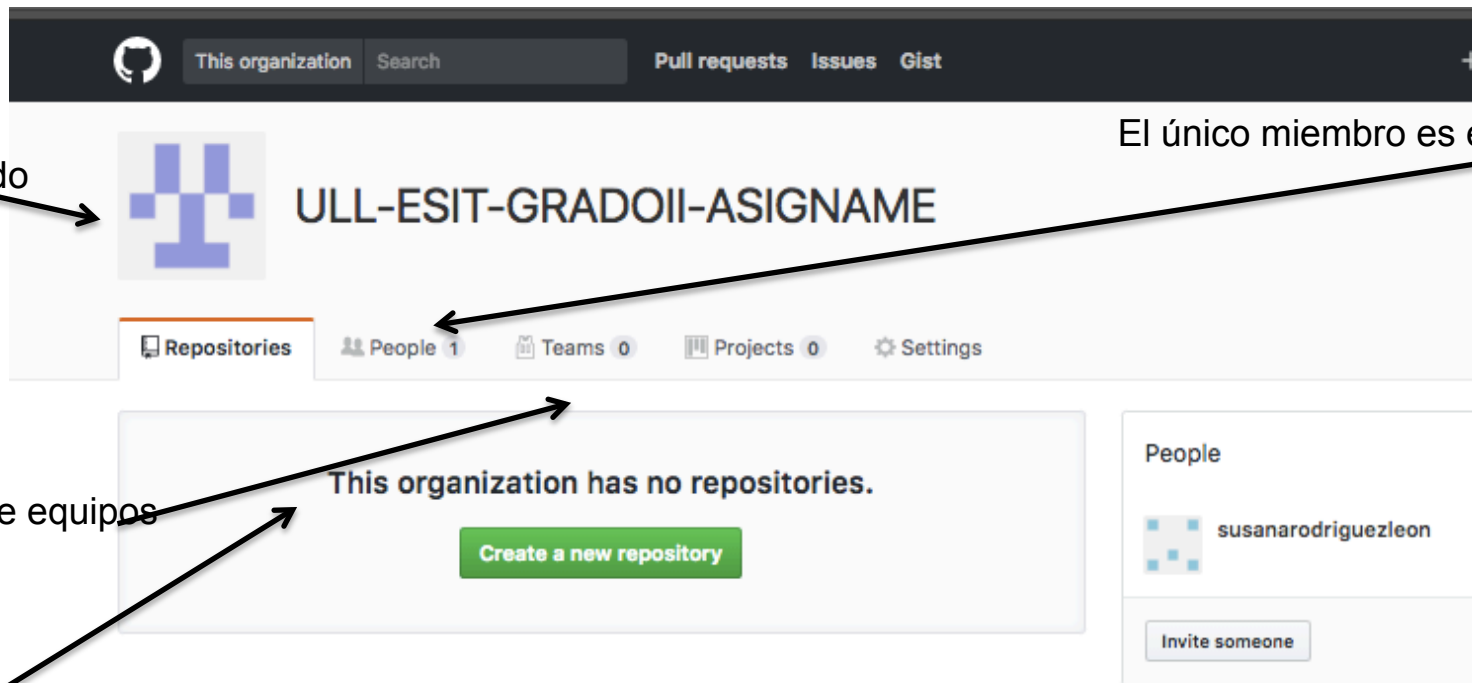
Continue

### Organization members

- ✓ See all repositories ⓘ
- ✓ Create repositories
- ✓ Organize into teams
- ✓ Review code
- ✓ Communicate via @mentions

No invites a los alumnos todavía:  
 quizá a los otros profesores, aunque  
 Podrás hacerlo en cualquier momento

# Cada curso lectivo creamos una organización para cada clase



Logo  
Generado  
por  
defecto

El único miembro es el profesor

No tiene equipos

La organización ha sido creada pero no tiene repositorios



# Crea un aula en GitHub Classroom

**GitHub Classroom** GitHub Education Sign in

**Your course assignments on GitHub**

GitHub Classroom automates repository creation and access control, making it easy to distribute starter code and collect assignments on GitHub.

[See how it works](#)

[Sign in with your GitHub account to get started](#)

- Create assignments**  
Distribute assignments with starter code. Students work on assignments individually or in groups using public or private GitHub repositories.
- Invite students**  
Students gain access to assignments using unique invitation URLs, eliminating the need to collect GitHub usernames in advance and manage access manually.
- Review progress**  
Teachers and teaching assistants can browse submissions by assignment, making it easy to follow along with student progress.

Click!






<https://classroom.github.com>

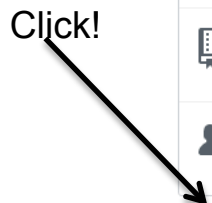
# Autorizar a Classroom a acceder a nuestra cuenta de GitHub

## Authorize application

GitHub Classroom by @github would like permission to access your account

### Review permissions

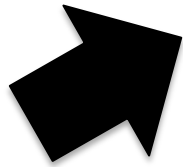
 <b>Personal user data</b> <span>▼</span>	Email addresses (read-only)
 <b>Organization webhooks</b> <span>▼</span>	Admin access
 <b>Repositories</b> <span>▼</span>	Public and private
 <b>Delete repositories</b> <span>▼</span>	Ability to delete any adminable repository
 <b>Organizations and teams</b> <span>▼</span>	Admin access



**Authorize application**

**You're not managing any classrooms yet.**

You can begin creating assignments once you have at least one classroom.



**Create your first classroom**

<https://classroom.github.com>



# Crea un aula en GitHub Classroom

Select an organization for your new classroom

Oh, you don't have any organizations on your GitHub account.

Please [create an organization on GitHub.com](#) and then come back.

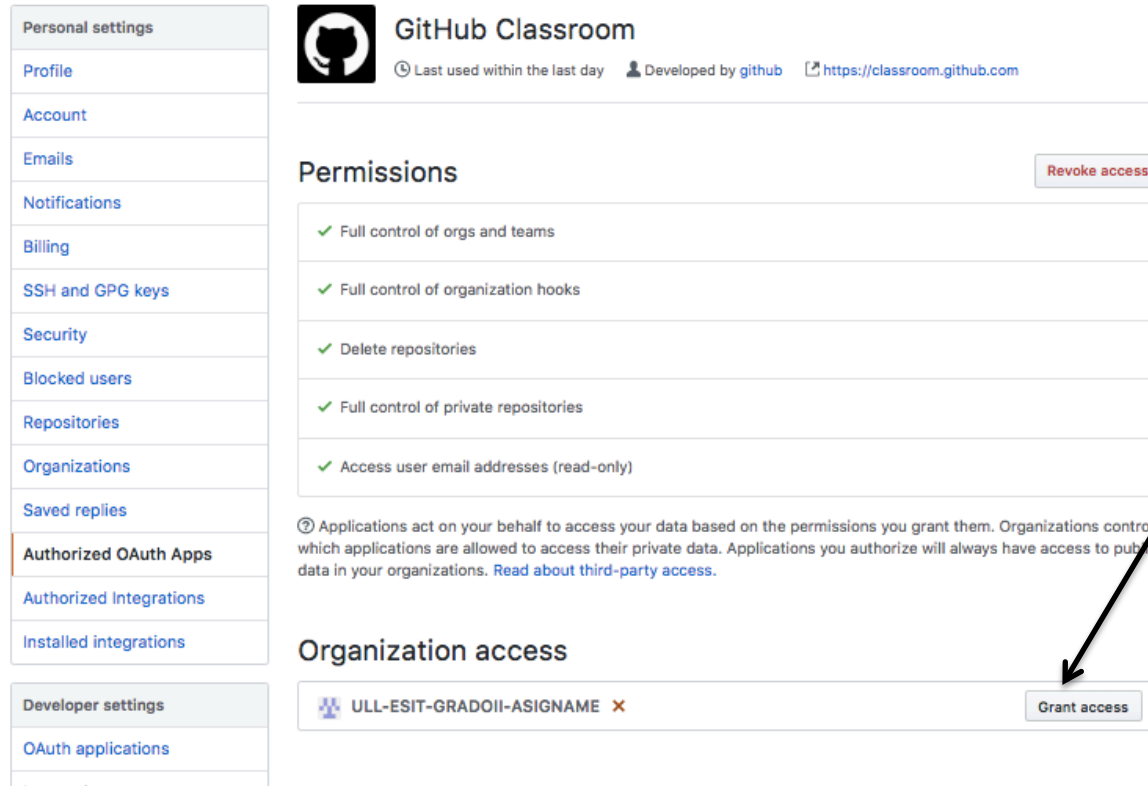
Click!

💡 ProTip! Don't see your organization? You need to [grant us access](#) first.

<https://classroom.github.com>

Tienes que indicarle a GitHub que le permita a Classroom el acceso a la organización

# Crea un aula en GitHub Classroom



The screenshot shows the GitHub Classroom permissions page. On the left is a sidebar with navigation links: Personal settings, Profile, Account, Emails, Notifications, Billing, SSH and GPG keys, Security, Blocked users, Repositories, Organizations, Saved replies, Authorized OAuth Apps (highlighted), Authorized Integrations, and Installed integrations. Below this is a 'Developer settings' section with 'OAuth applications'. The main content area shows the 'GitHub Classroom' profile with a 'Revoke access' button. Under 'Permissions', there are five checked items: Full control of orgs and teams, Full control of organization hooks, Delete repositories, Full control of private repositories, and Access user email addresses (read-only). Below the permissions is a note about application access. Under 'Organization access', there is one entry for 'ULL-ESIT-GRADOII-ASIGNAME' with a 'Grant access' button. An arrow points from the text 'Click!' to this 'Grant access' button.

Click!

<https://github.com/settings/applications>  
 Github > profile > Authorized OAuth Apps

En la configuración de tu cuenta dale permiso a Classroom para acceder a la organización

# Crea un aula en GitHub Classroom

The screenshot shows the GitHub Classroom interface. At the top left, a dark header says "GitHub Classroom". Below it, a light grey box prompts "Select an organization for you" and shows a GitHub logo with the text "@ULL-ESIT-...". An arrow points from this box to the text "Nuestra aula ha sido creada".

Below the organization selection, there are instructions: "Invite other administrators", "1. Add them to your GitHub Organization", "You must add them to the Organization as an Owner in order for them to have access.", "You can do so at <https://github.com/orgs/ULL-ESIT-GRADOII-ASIGNAME/people>", "2. Give them this URL", "After signing in, they will automatically be added to this classroom.", and a text input field containing "https://classroom.github.com/classrooms/28709604-ull-esit-gradooii-asigne" with a "Copy classroom link" button. A "Continue" button is at the bottom.

At the top right, a white box says "Assignments". Below it, the text "This organization doesn't have any assignments yet." is displayed above a green "Create your first assignment" button. An arrow points from the "Continue" button to the "Assignments" box, and another arrow points from the "Create your first assignment" button to the text "Click!".

Ahora podemos añadir a otros profesores y crear nuevas asignaciones para los alumnos



# Creando asignaciones en el aula

The screenshot shows the GitHub Classroom interface for a classroom named 'ULL-ESIT-PL-1617'. The interface is divided into two main sections. The top section is a green header with the classroom name and a 'Manage classroom' button. The bottom section is a white box titled 'New Assignment' which contains two options: 'Individual assignment' and 'Group assignment'. Each option has a description and a green button to create the assignment.

GitHub Classroom

ULL-ESIT-PL-1617  
@ULL-ESIT-PL-1617

Manage classroom

### New Assignment

**Individual assignment**  
Each participant works individually on their own repository.  
[Create an individual assignment](#)

**Group assignment**  
Participants form teams that work together on a shared repository.  
[Create a group assignment](#)

Las asignaciones pueden ser individuales o en equipo

# Creando una asignación en equipo

GitHub Classroom

ULL-ESIT-PL-1617  
@ULL-ESIT-PL-1617

Manage classroom

New group assignment

Your assignment title

Your assignment repository prefix

This will prefix each GitHub repository that is created for this assignment. May only contain alphanumeric characters, underscores or hyphens.

Public  
Submit assignments using public repositories. All submissions will be visible to the world.

Private  
Submit assignments using private repositories. Submissions will only be visible to the submitter and organization owners.

Give students Admin permissions on their repository

Add your starter code from GitHub (optional)

Search repositories

Título de la tarea

Prefiero darles  
A los estudiantes  
Permisos de  
Administración  
Sobre el repositorio  
Que se les creará

Repo con el código  
de partida



GitHub Classroom

ULL-ESIT-PL-1617

@ULL-ESIT-PL-1617

Manage classroom

Assignments

New assignment

Assignment Title	Type	URL	Action
Tareas Iniciales	Group assignment for Grupos de PL 16/17	https://classroom.github.c	Copy invitation link
Primeros pasos en NodeJS	Group assignment for Grupos de PL 16/17	https://classroom.github.c	Copy invitation link
Evaluacion Tareas Iniciales	Individual assignment	https://classroom.github.c	Copy invitation link
Evalua Despliegue en Heroku	Individual assignment	https://classroom.github.c	Copy invitation link
Estudiar las Rutas en ExpressJS	Group assignment for Grupos de PL 16/17	https://classroom.github.c	Copy invitation link
Evalua Rutas en ExpressJS	Individual assignment	https://classroom.github.c	Copy invitation link

Las Asignaciones Tienen una URL asociada

# Publicamos la URL de la asignación en el Campus Virtual

## 24 de abril - 30 de abril


### PEGs

#### Apuntes de PEG.js

- Introducción a los PEGs
- PEGJS
- La Calculadora Simple

#### Repositorios

- Ejemplos en PEGjs 0.10.0
- Descripción de la Práctica "Práctica: **Analizador Usando PEG.js**"
- Puede encontrar su asignación en [GitHub en este enlace.](#)

 Práctica: **Analizador Usando PEG**

 Práctica: **Evaluar PEG**

👤 Actualizando Taller en 24 de abril - 30 de abril ⓘ

▶ Expandir todo

▼ General

Nombre del taller\*

Descripción 

```
* [Descripción de la Práctica "Práctica: Analizador Usando PEG.js"](https://casianorodriguezleon.gitbooks.io/ull-esit-1617/content/practicas/practicapegparser.html)
* Puede encontrar su [asignación en GitHub en este enlace](https://classroom.github.com/group-assignment-invitations/87f326e2212ec0a6f8627ca5a6c76fb2)
```

Formado Markdown

Muestra la descripción en la

Publicamos el enlace que provee Classroom  
En el aula virtual de la asignatura

## Vista de un alumno aceptando una asignación

- Tan pronto el alumno hace **click** en el enlace publicado en el campus virtual se le lleva a una página en la que se le pide aceptar la asignación
- Si acepta por primera vez es automáticamente añadido como miembro a la organización de la asignatura



ULL-ESIT-PL-1617  
@ULL-ESIT-PL-1617

Accept the **Analizador Usando PEG** assignment

Accepting this assignment will give your team access to the assignment repository in the @ULL-ESIT-PL-1617 organization on GitHub.

Please be certain that the team you are selecting is the correct team as you cannot change this later

Join an existing team

<b>Airam-Jorge-Kevin</b> 3 students  <input type="button" value="Join"/>	<b>nicolas-ibrahim-david</b> 4 students  <input type="button" value="Join"/>
<b>Guillermo-Eduardo-Oscar-Sergio</b> 4 students  <input type="button" value="Join"/>	<b>Oscar-Angel-Norberto</b> 3 students  <input type="button" value="Join"/>



## Alumno aceptando una asignación

- Si la asignación fue configurada como tarea de equipo y es la primera vez que esto ocurre:
  - El primer alumno crea el equipo y le da nombre
  - Los restantes miembros que lleguen después se unen a ese equipo
- 
- Los profesores siempre pueden cambiar los equipos, añadir y/o suprimir miembros a la organización, a los equipos, etc.
  - Cuando se crea una asignación es posible reutilizar un anterior conjunto de equipos o crear uno nuevo

Nombre De la asignación

Vista del profesor de una asignación

The screenshot shows a GitHub Classroom group assignment page. At the top, the title is 'Analizador Usando PEG' with a subtitle 'Group assignment for marzo 7 teams'. A 'Group assignment settings' button is in the top right. Below the title, a 'Give this to your students' section contains a URL: 'https://classroom.github.com/group-assignment-invitations/87f326e2212ec0a6f8627ca5a6c76fb2' and a 'Copy invitation link' button. A list of teams follows, each with a name, profile pictures, and a repository link. The teams are: 'Airam-Jorge-Kevin' (link: ULL-ESIT-PL-1617/analizador-usando-peg-aira...), 'nicolas-ibrahim-david' (link: ULL-ESIT-PL-1617/analizador-usando-peg-nic...), 'Guillermo-Eduardo-Óscar-Sergio' (link: ULL-ESIT-PL-1617/analizador-usando-peg-guil...), 'Oscar-Angel-Norberto' (link: ULL-ESIT-PL-1617/analizador-usando-peg-osc...), and 'victor-pamela-jesus' (link: ULL-ESIT-PL-1617/analizador-usando-peg-vict...).

Annotations with arrows point to:
 

- 'Nombre De la asignación' pointing to the title 'Analizador Usando PEG'.
- 'Conjunto de equipos' pointing to the subtitle 'Group assignment for marzo 7 teams'.
- 'Link de la asignación' pointing to the URL in the 'Give this to your students' section.
- Two arrows pointing from the team names to their respective repository links.

Para cada equipo se crea un repositorio que es clonado a partir del que el profesor Estableció en la asignación

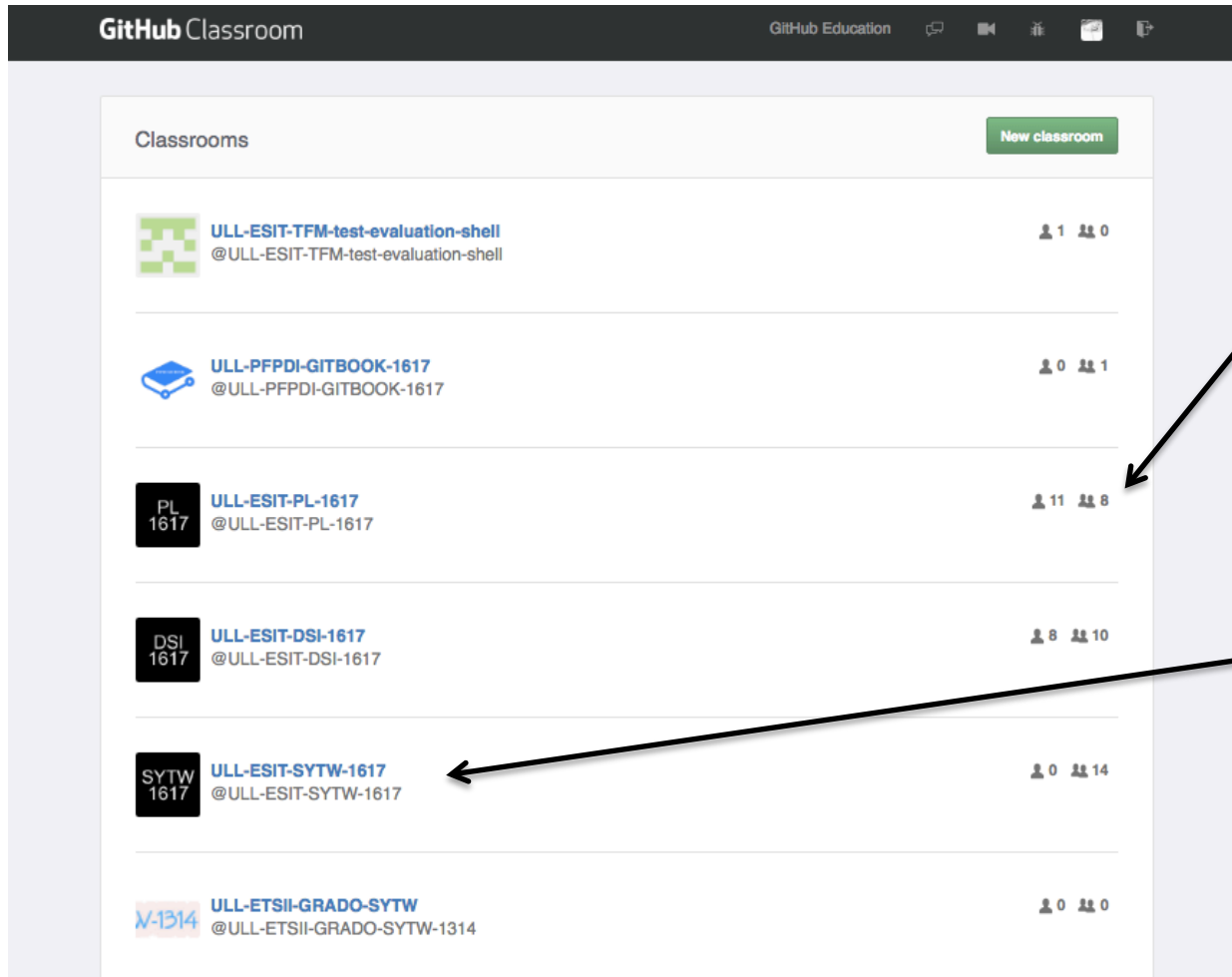


## Vista del profesor de las aulas

Nº de asignaciones individuales y de equipo En el aula

Podemos tener tantas aulas como necesitemos

El nombre del aula classroom Lo hago coincidir con el nombre De la organización





## Vista del profesor de la Organización

PL 1617 ULL-ESIT-PL-1617  
http://campusvirtual.ull.es

Repositories People 46 Teams 28 Projects 1 Settings

asignación Equipo

proyecto-pl-pedro-tarun-joaquin-abian Private  
proyecto-pl-pedro-tarun-joaquin-abian created by GitHub Classroom  
JavaScript Updated 5 hours ago

evaluar-analisis-de-ambito-alu0100841565 Private  
evaluar-analisis-de-ambito-alu0100841565 created by GitHub Classroom  
JavaScript Updated 5 hours ago

evaluar-analisis-de-ambito-alu0100894325 Private  
evaluar-analisis-de-ambito-alu0100894325 created by GitHub Classroom  
JavaScript Updated 5 hours ago

Top languages  
JavaScript HTML Shell CSS

People 46 >

Invite someone

Configuración de la Organización

Los alumnos  
Trabajan  
dentro  
De la organización.  
Todos los trabajos  
Del curso en un sitio

Podemos controlar  
Quien hizo qué  
Con gran  
detalle



## Cada Alumno una web, cada Repo una web, cada Organización una web

https://mdbgalvan.github.io

ULL Páginas WEBS para Prácticas Estudio: Grado en Informática  
Alumna: María D. Batista Galván

ETSI

INDICE

- Introducción
- Procesadores de Lenguajes - PL
- Interfaces Inteligentes - II
- Sistemas de Interacción Persona Computador - HCI

• **Introducción**

En esta dirección se encuentran todas las prácticas que he tenido que realizar a lo largo de la carrera del "Grado de Ingeniería Informática". Concretamente, en este enlace se muestra los enlaces de todas esas prácticas. El objetivo de las prácticas es muy variado debido a que son pedidas por distintas asignaturas. Por lo que, he decidido agruparlas por asignatura.

• **Procesadores de Lenguajes**

- **Práctica 1: Conversor de Temperaturas (2014/02/02)**

Ejemplo de alumna: <https://mdbgalvan.github.io/> Curso 2013/2014

# Solicitamos repositorios privados a GtiHub

<https://education.github.com/>



TEACH AND LEARN  
BETTER, TOGETHER

Click!



Request a discount



STUDENT DEVELOPER PACK

# Request a discount

Discounted and free plans are available for educational use

[https://education.github.com/discount\\_requests/new](https://education.github.com/discount_requests/new)

## Step 1

Tell us what you need

## Step 2

Tell us about you

You have submitted 8 requests:

- Jan 30, 2017 for @ULL-ESIT-DSI-1617 – **Approved**
- Jan 30, 2017 for @ULL-ESIT-PL-1617 – **Approved**
- Dec 8, 2016 for @ULL-ESIT-GRADOII-TFG – **Approved**
- Nov 29, 2016 for @ULL-PFPDI-GITBOOK-1617 – **Approved**
- Sep 6, 2016 for @ULL-ESIT-SYTW-1617 – **Approved**
- Feb 5, 2016 for @ULL-ESIT-GRADOII-DSI – **Approved**
- Feb 5, 2016 for @ULL-ESIT-GRADOII-PL – **Approved**

# Solicita repositorios privados

**Which best describes you?**

Student  Teacher

Researcher  Administrator/staff

Other

**What are you looking to get a discount for? ⓘ**

Individual account  Organization account

**Next**

<b>Step 1</b> Tell us what you need	<b>Step 2</b> What's the organization?	<b>Step 3</b> What's it for?	<b>Step 4</b> Tell us about you
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**Which GitHub organization is this for?**

ULL-ESIT-GRADOII-DSI

If the organization doesn't exist yet, go [create it](#), then refresh this page. Feel free to create it on the Open Source plan, and you will be automatically upgraded if your request is approved.

**Which best describes what this organization will be used for?**

Classroom  Student group

Research group  Other

**Next**

# Solicita repositorios privados

Step 1 Tell us what you need | Step 2 What's the organization? | **Step 3 What's it for?** | Step 4 Tell us about you

Tell us more about your class.

**Class name**

**Class URL**

The link to the entry in the course

**How many private repositories**

**Next**

**Name**

**Verify academic status**

Select your school-issued email address:

If your school-issued email address isn't listed, please [add and verify it](#), then refresh this page.

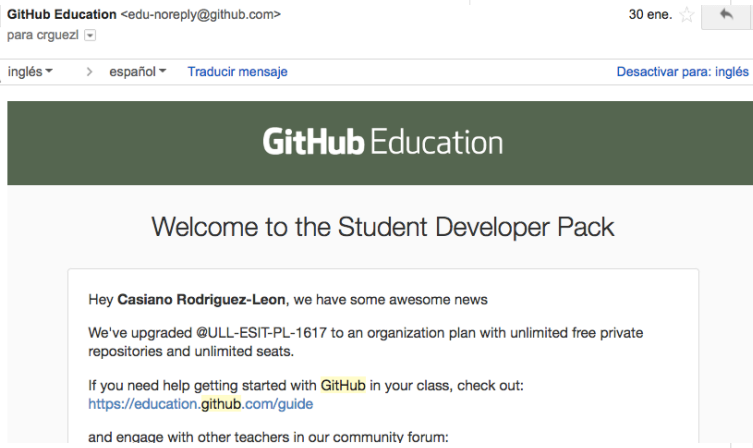
**Upload Validation**

**Drop file here or click to upload.**

Please upload an image of your school ID or other proof of affiliation. Please make sure that at least one date that demonstrates your current academic status is clearly visible.

**school name**

**How do you plan to use GitHub in your class?**



Mail de respuesta

Tardan poco en contestar afirmativamente **concediendo un número ilimitado de repos privados**

# GitHub Education Community

Es seguro | <https://education.github.community>

GitHub Education Community



Welcome to the GitHub Education Community, a supportive environment for educators to collaborate with each other, and with GitHubbers directly. We invite you to tell your story, ask questions, and share resources about technology education.

Get to know your fellow community members and [introduce yourself](#).

all categories ▾ **Categories** Unread (2) Latest New Top + New Topic

Category	Topics
<b>Teachers</b> Discussions about teaching technology. Topics need not be GitHub-specific.	3 / month 1 unread
<b>GitHub Classroom</b> This category is for discussion about GitHub Classroom + support from other educators using Classroom in their courses.	3 / month 1 unread
<b>Students</b> Learning to code? Start here!	2 / month
<b>Miscellaneous</b> Topics that don't need a category, or don't fit into any other existing category.	1 / month

Latest		
	I need your help to write an email that may bring my school to GitHub ● GitHub Classroom	3 1d
	📌👋 Teachers! Introduce yourself here ● Teachers	466 2d
	GitHub Classroom: plagiarism & cheating detection ● GitHub Classroom	6 3d
	📌👋 Students! Introduce yourself here ● Students	56 3d
	Build your own classroom HQ ● Teachers	2 7d

Hay una comunidad de usuarios que puede ayudarte  
Con los problemas que surjan



## Conclusiones, Necesidades, Mejoras

- Necesidad de Integración de GitHub, Classroom, etc. con las plataformas educativas existentes como Moodle (Véase [ghedsh](#))
- El desarrollo de herramientas que permitan un mejor aprovechamiento e integración de servicios como los que provee GitHub en el contexto de la enseñanza (por ejemplo uso de los servicios de integración continua como Travis para los procesos de evaluación del alumno)
- Conveniencia de difundir la formación en las metodologías, técnicas y herramientas asociadas al control de versiones y a los servicios de gestión de repositorios entre la comunidad educativa
- Fomentar el desarrollo de buenas prácticas para la mejor explotación de este tipo de herramientas (mejores flujos de trabajo)



## Referencias/Enlaces

1. [GitHub Classroom: Instrucciones](#)
2. [GitHub Classroom — Getting Started \(Video\)](#)
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5. [Using GitHub in the Classroom – a Collaborative Learning Experience](#) (2015 IEEE 21st International Symposium for Design and Technology in Electronic Packaging)
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7. [GitHub in the classroom: not just for group projects](#) (Journal of Computing Sciences in Colleges. Volume 28 Issue 4, April 2013)
8. [GitHub como herramienta docente](#) (Actas de las XXI Jornadas de la Enseñanza Universitaria de la Informática. 2015)
9. [A GitHub Garage for a Digital Humanities Course](#) (New Directions for Computing Education: Embedding Computing Across Disciplines, 2017, Springer)
10. [Towards a Collaborative Learning Platform: The Use of GitHub in Computer Science and Software Engineering Courses](#) (Joseph Feliciano, Master Thesis. 2015. University of Victoria)

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/ 22 y 23 de mayo de 2017



# ¡Muchas gracias!

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**8<sup>a</sup>** Jornadas de  
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