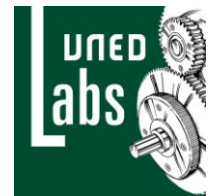


Módulos EJSApp

Integración de laboratorios
virtuales y remotos en Moodle

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¿Qué es Moodle?



- Sistema de Gestión del Aprendizaje (LMS)
- Recursos y herramientas para cursos online: registro de usuarios, control de acceso, foros, actividades, evaluaciones...
- Gratuito
- Código abierto
- El LMS más utilizado en todo el mundo (65 millones de usuarios registrados)

¿Qué son los plugins?



- Extensiones creadas por los usuarios
- Añaden funcionalidades y características que no incorpora el programa base
- Gratuitos y de código abierto
- Más de 400 plugins descargables desde la página oficial de Moodle
- Varios tipos: actividades, recursos, repositorios, bloques, filtros, etc.



Cuatro módulos para integrar laboratorios virtuales y remotos, creados con EJS, en Moodle

Actividad:

- EJSApp
- EJSApp Booking System (EJSApp BS)

Bloques:

- EJSApp File Browser (EJSApp FB)
- EJSApp Collab Sessions (EJSApp CS)



EJSApp



- Agregar aplicaciones de EJS en Moodle
- Fijar tamaño, añadir texto, estado inicial, condiciones de acceso de Moodle...

The screenshot shows the Moodle course page configuration interface for an EJS application. It is divided into two main sections:

- General:** This section includes a "Lab name" field with the value "Gyroscope Collaborative Virtual Lab". Below it is a "Description" field with a rich text editor toolbar. The "Path" is set to "p". There is an unchecked checkbox for "Display description on course page".
- .jar file that encapsulates the EJS lab:** This section features a "File" field with a "Choose a file..." button. Below this is a dashed rectangular box containing a blue downward-pointing arrow and the text "ejs_Gyroscope.jar - You can drag and drop files here to add them." Below the box are settings for "Size the applet" (set to "Let Moodle set the size"), "Preserve aspect ratio" (set to "No"), and input fields for "Applet width (px)" and "Applet height (px)".



EJSApp BS



- Controlar el acceso a laboratorios remotos

EN-English

Make a booking

My bookings

Select date and plant

December 2012

Sun	Mon	Tue	Wed	Thu	Fri	Sat
48						1
49	2	3	4	5	6	7
50	9	10	11	12	13	14
51	16	17	18	19	20	21
52	23	24	25	26	27	28
01	30	31				

Remote Laboratory of Springs' Elasticity

- Remote Laboratory of Springs' Elasticity
- Remote Laboratory of Thin Lenses
- Remote Laboratory of the Three Coupled Tanks**
- Remote Laboratory of Light in Isotropic Media
- Remote Laboratory of the Heatflow
- Remote Laboratory of the Servo-Motor
- Lab. Remoto del Sistema de Dos Tanques

EN-English

Make a booking

My bookings

Select date and plant

December 2012

Sun	Mon	Tue	Wed	Thu	Fri	Sat
48						1
49	2	3	4	5	6	7
50	9	10	11	12	13	14
51	16	17	18	19	20	21
52	23	24	25	26	27	28
01	30	31				

Remote Laboratory of the Three Coupled Tanks

Remote Laboratory of the Three Coupled Tanks

Luis de la Torre
ldelatorre@dia.uned.es

Check

Select slots

Date : 30-12-2012 Plant : Remote Laboratory of the Three Coupled Tanks

<input type="checkbox"/> 00:00 - 01:00	<input type="checkbox"/> 06:00 - 07:00	<input type="checkbox"/> 12:00 - 13:00	<input checked="" type="checkbox"/> 18:00 - 19:00
<input type="checkbox"/> 01:00 - 02:00	<input type="checkbox"/> 07:00 - 08:00	<input type="checkbox"/> 13:00 - 14:00	<input checked="" type="checkbox"/> 19:00 - 20:00
<input type="checkbox"/> 02:00 - 03:00	<input type="checkbox"/> 08:00 - 09:00	<input type="checkbox"/> 14:00 - 15:00	<input checked="" type="checkbox"/> 20:00 - 21:00
<input type="checkbox"/> 03:00 - 04:00	<input type="checkbox"/> 09:00 - 10:00	<input type="checkbox"/> 15:00 - 16:00	<input checked="" type="checkbox"/> 21:00 - 22:00
<input type="checkbox"/> 04:00 - 05:00	<input type="checkbox"/> 10:00 - 11:00	<input type="checkbox"/> 16:00 - 17:00	<input checked="" type="checkbox"/> 22:00 - 23:00
<input type="checkbox"/> 05:00 - 06:00	<input type="checkbox"/> 11:00 - 12:00	<input type="checkbox"/> 17:00 - 18:00	<input checked="" type="checkbox"/> 23:00 - 00:00

Available Not available The plant is turned on
Occupied Selected

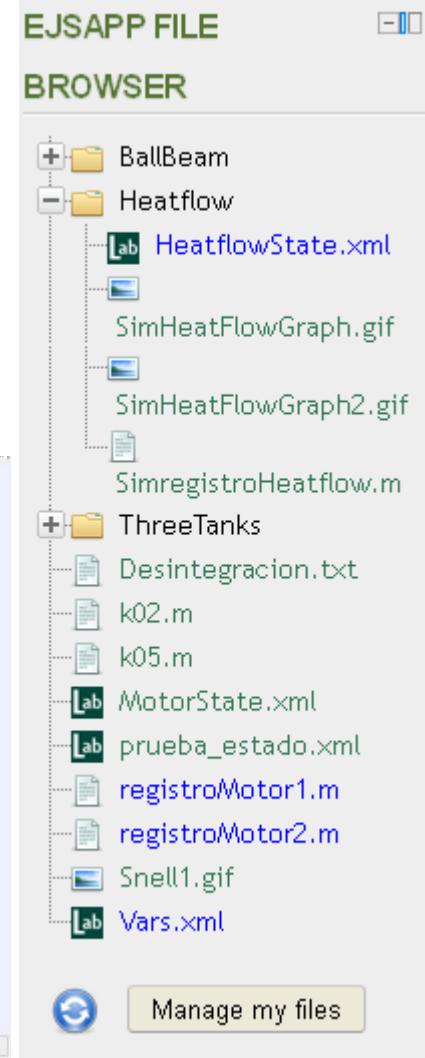
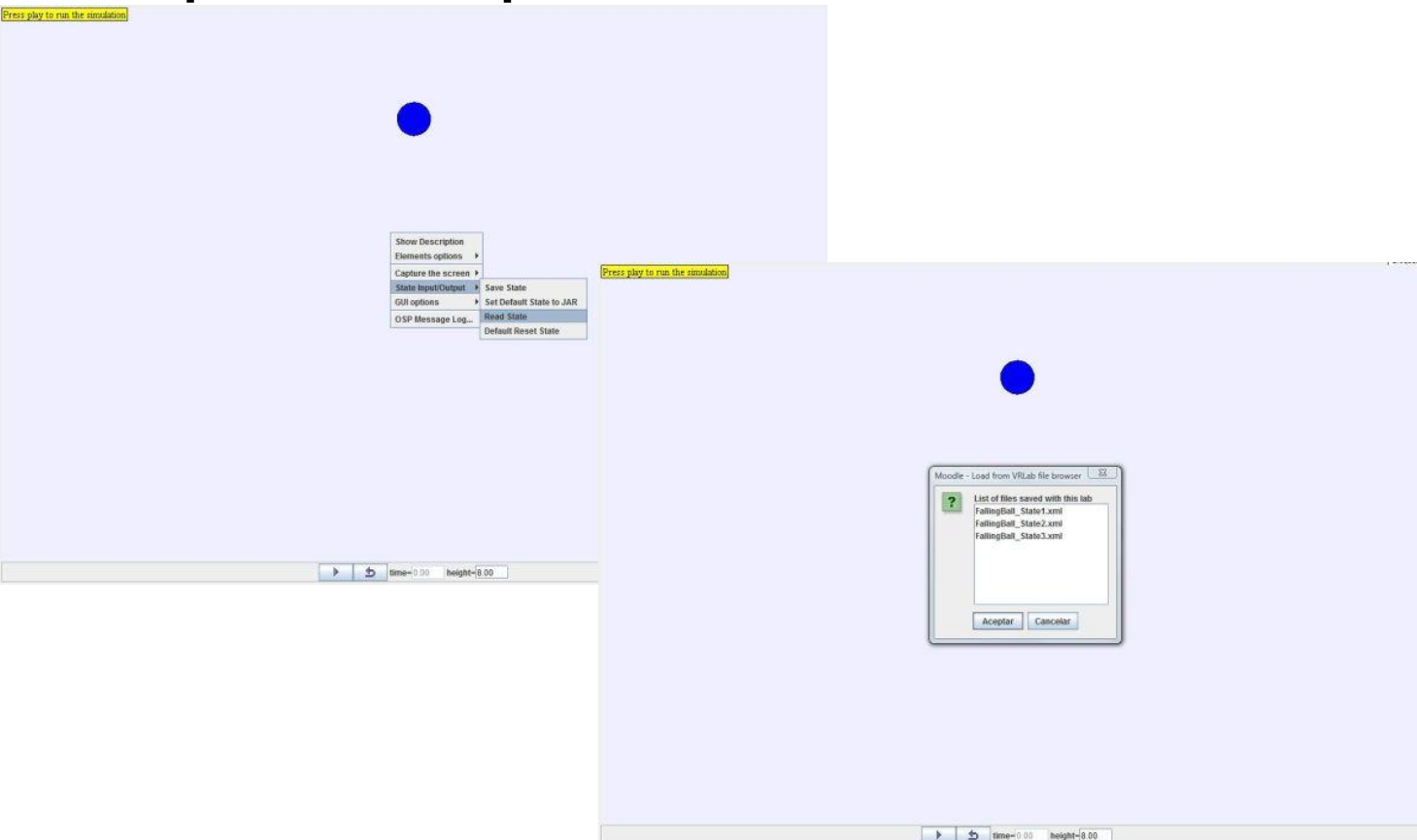
Next



EJSApp FB



- Almacenar ficheros generados por las aplicaciones EJS

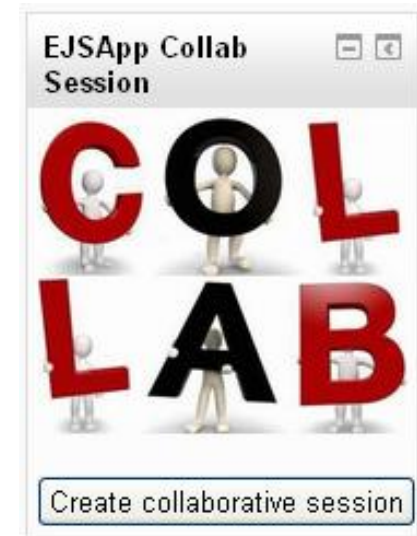




EJSApp CS



- Trabajo colaborativo con las aplicaciones EJS
- Crear/cerrar sesiones, invitar usuarios, enviar/recibir avisos



The screenshot displays the EJSApp interface for a collaborative session. The top navigation bar includes 'Home', 'My courses', 'Aut-1', and 'Collaborative session'. The main content area is divided into several panels:

- Left Panel:** A schematic diagram of three coupled tanks with control valves and pumps. Below it, a 'CONTROL' panel shows PID settings for three pumps (A1, A2, A3) and a 'FPS' setting.
- Center Panel:** Two graphs. The top graph, 'H1 - H2 - H3 - Setpoint', shows liquid levels in mm over 400 seconds. The bottom graph, 'Pump1 - Pump2', shows pump flow rates in % over 400 seconds.
- Right Panel:** A navigation menu with options like 'My home', 'Site pages', 'My courses', and 'TEJS'. Below it, a 'Ficheros Priv.' panel shows file management options.
- Bottom Right:** A video feed showing participants in a virtual lab environment.

At the bottom, there are status bars for 'Simulation mode' and 'Not connected'.



- Última versión estable (Página oficial de Moodle):

<https://moodle.org/plugins/browse.php?list=set&id=27>

- Última versión en desarrollo (Github):

<https://github.com/UNEDLabs>