

# **Web Games**

**Week 9 - Saving & Loading**



# Objectives

- Explore options for saving & loading data
  - Local Storage
  - Save & load actions
- Work on playable prototype projects

# 1. Local Storage



# Local Storage

The `localStorage` object allows you to store data locally on the user's device. Within a web game a typical use case would be to store a personal best high score.

As the name suggests local storage is saved to the users device, so is only accessible 'locally' to that user. However, as local storage is saved to the device, rather than left 'in the cloud' this data is accessible when offline.



# Local Storage Basics

- Local storage values are stored under named ‘keys’
- Can set or get the values stored under these keys
- Events occur asynchronously - need to wait for them to complete

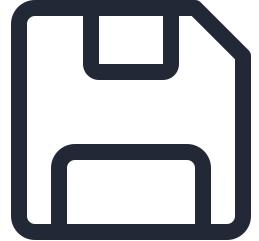


# Local Storage Demo

Let's take a look at local storage in action. For this we will use the Endless Runner game created in week 4.

You will find a starter file and accompanying written guide for this demo on Ultra.

## **2. Save and Load**



# Save and load actions

Construct has some simple Save and Load system actions that allow you to save the state of the game with little effort.

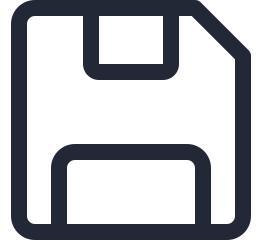
When run, the save action saves the current state of all game objects and variables meaning that when running the load action we can return to this saved state.



# Save & Load Demo

Let's take a look at the save and load functionality in action. For this we will use the Platform game created in week 5.

You will find a starter file and accompanying written guide for this demo on Ultra.



# Multiple Save Slots

By combining local storage and the save and load actions it is possible to create 'save slots' in construct. This more advanced method of handling saves is demonstrated in a video tutorial which continues on from the basic demo we've just covered.

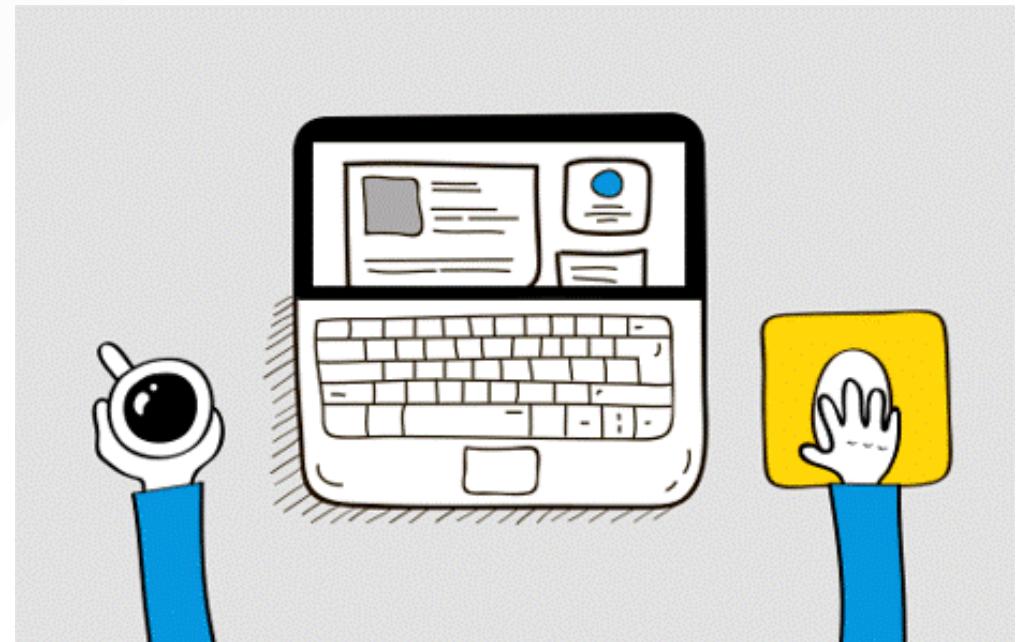
In addition to showing how to create multiple save slots the video demonstrates the use of Global UI elements, useful for having persistent UI layers across different layouts.

# **3. Project Development**

# Project Development



Use the remainder of the session to explore the demo materials and continue project development on your playable prototypes.



# Up Next...

## Creating Leaderboards

[Icons sourced from Flaticon](#)