

The background is a watercolor illustration. It features a landscape with a cross on a hill in the center. There are trees on either side of the hill, and a fence runs across the lower part of the image. The colors are warm, with yellows, oranges, and browns, giving it an autumnal or aged feel. The paper has a torn, deckled edge.

Stevie W


And the Quest for 60 fps

Stevie W






YouTube^{GB} Search

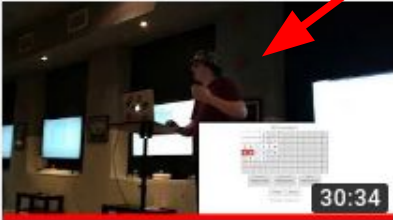
 Steven Waterman

HOME VIDEOS PLAYLISTS CH

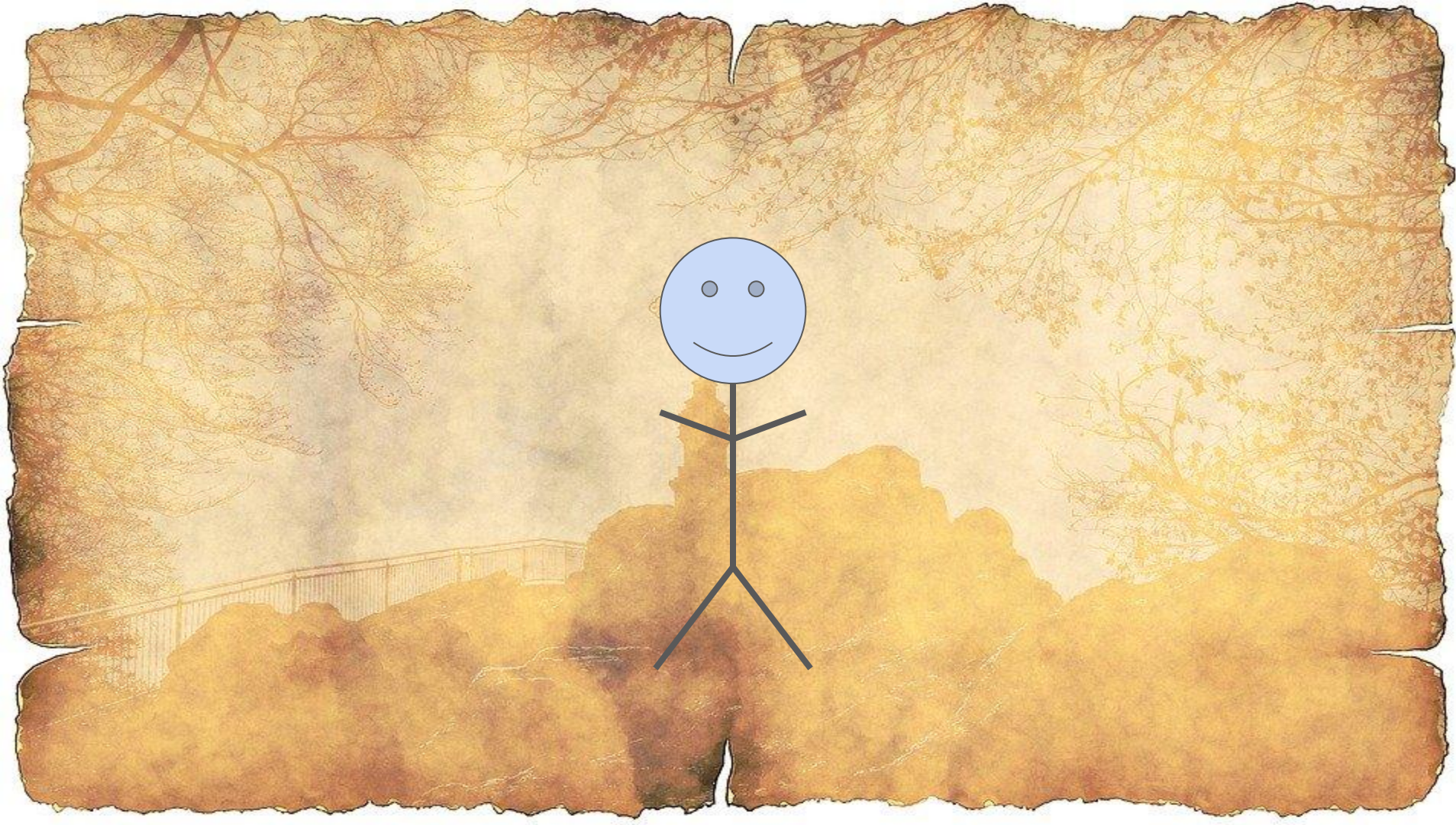
Uploads ▶ PLAY ALL

 3:05

How to Solve Minesweeper in 3 minutes - Lightning Talk ...

 30:34

Solving Minesweeper in Polynomial Time - NE: Tech...





Minesweeper

			1										
			1		3								
2	2	1	1	1	4								
X	X	1	1		4								
	3	2	1										

Constraint 1
Nothing selected

Constraint 2
Nothing selected

Targets
Nothing selected

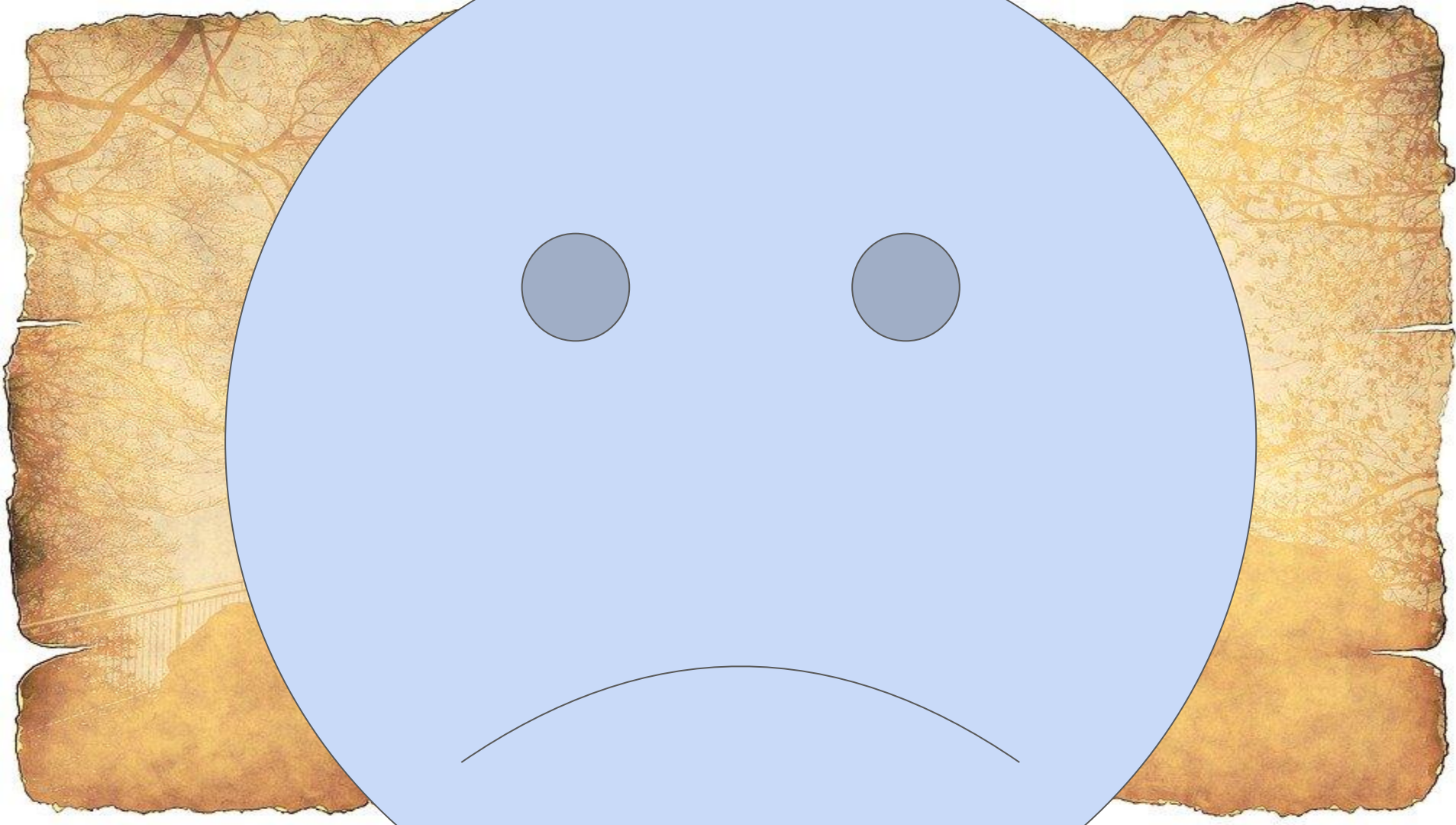
Deselect

Subtract

Reduce

Merge

Complex Constraints:





Minesweeper

			1										
			1		3								
2	2	1	1	1	4								
X	X	1	1		4								
	3	2	1										

Constraint 1
Nothing selected

Constraint 2
Nothing selected

Targets
Nothing selected

Deselect

Subtract

Reduce

Merge

Complex Constraints:



Minesweeper

			1										
			1		3								
2	2	1	1	1	4								
X	X	1	1		4								
	3	2	1										

Constraint 1
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Constraint 2
Nothing selected

Targets
Nothing selected

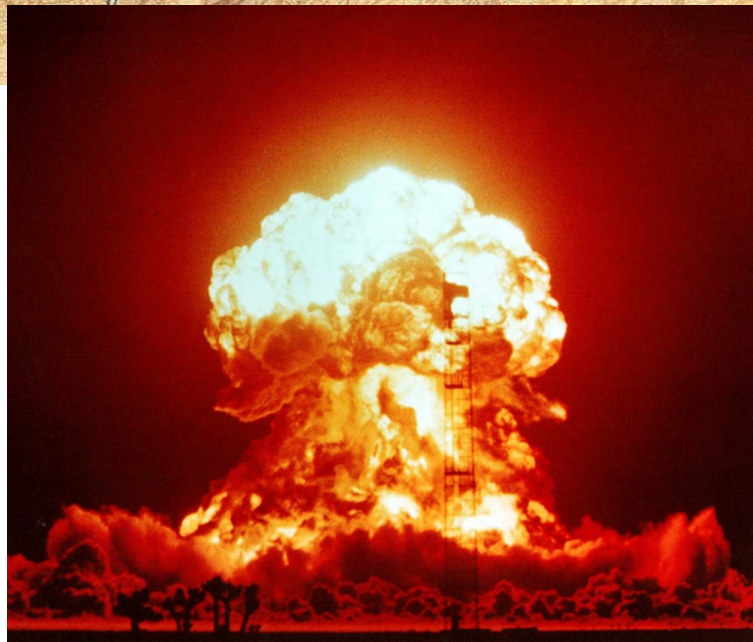
Deselect

Subtract

Reduce

Merge

Complex Constraints:



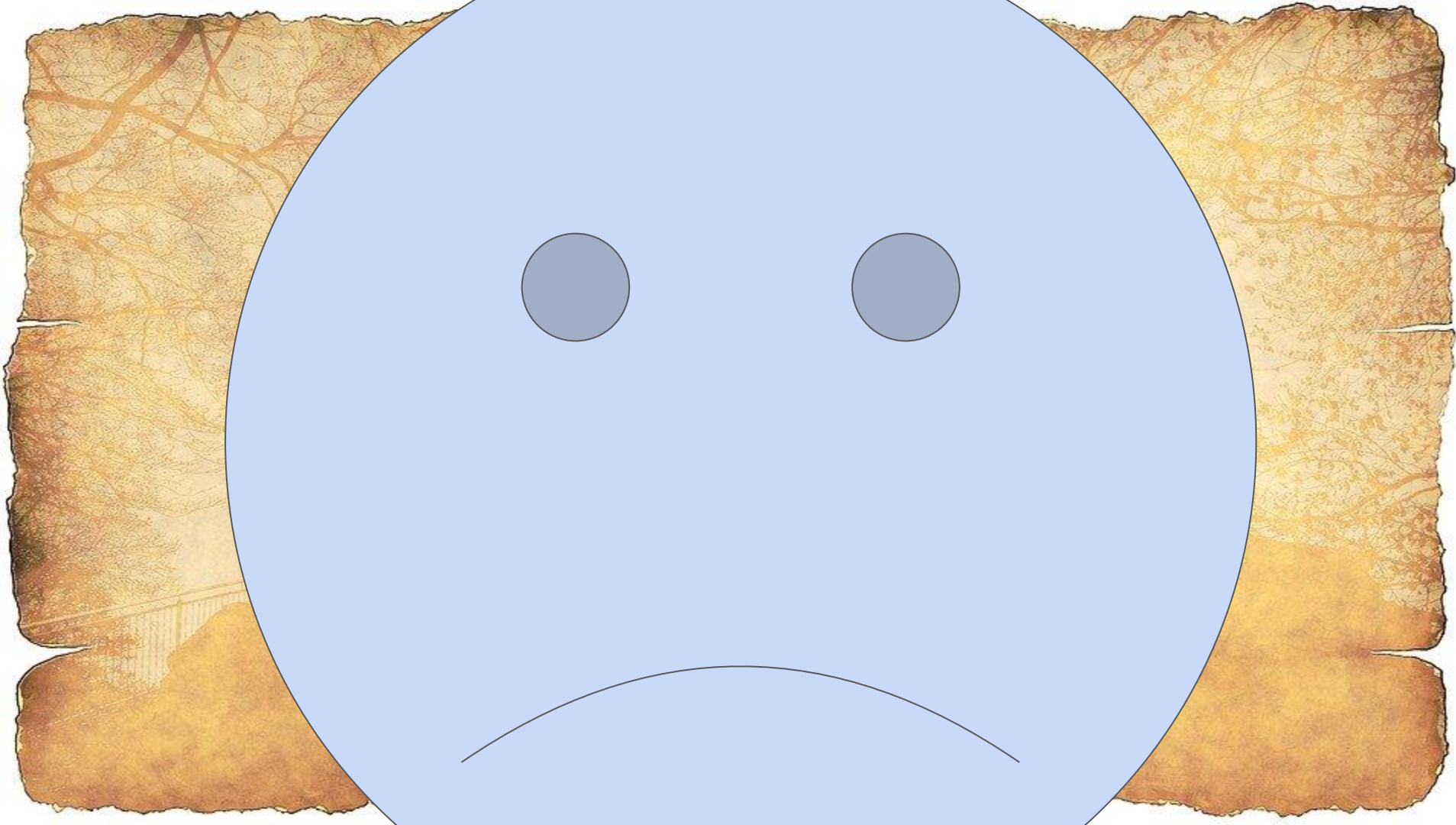
Deselect

Subtract

Reduce

Merge

Complex Constraints:

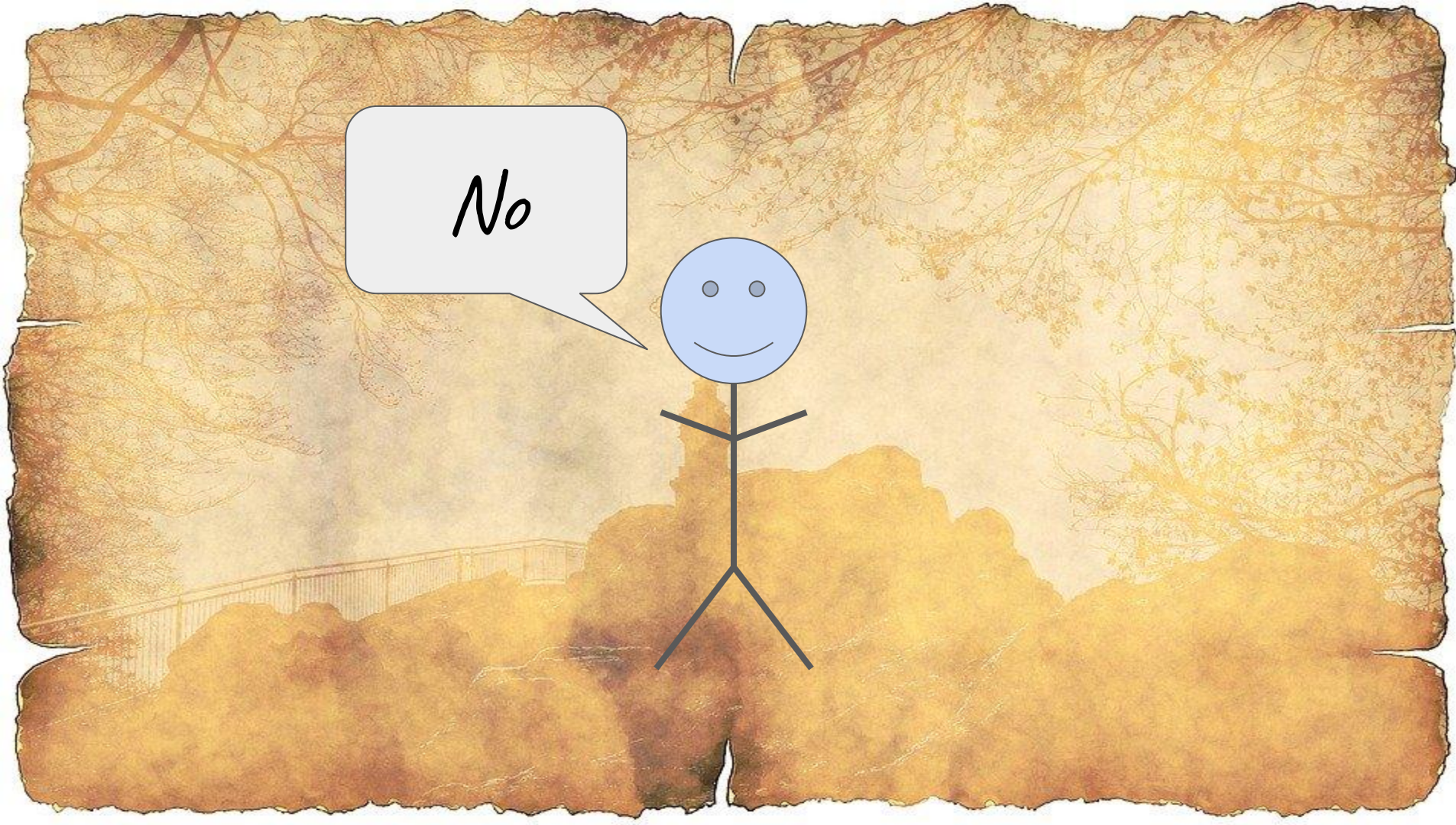


A large, stylized sad face is centered on the page. The face is composed of a large, light-colored oval with a thin black outline. Inside the oval, there are two small, solid gray circles for eyes. A thin black line forms a downward-curving arc for a mouth. On the forehead of the face, there is a small, faint cross symbol. The background of the entire image is a textured, mottled orange and yellow, resembling aged paper or parchment. The sad face is superimposed over this background.

Well that's embarrassing



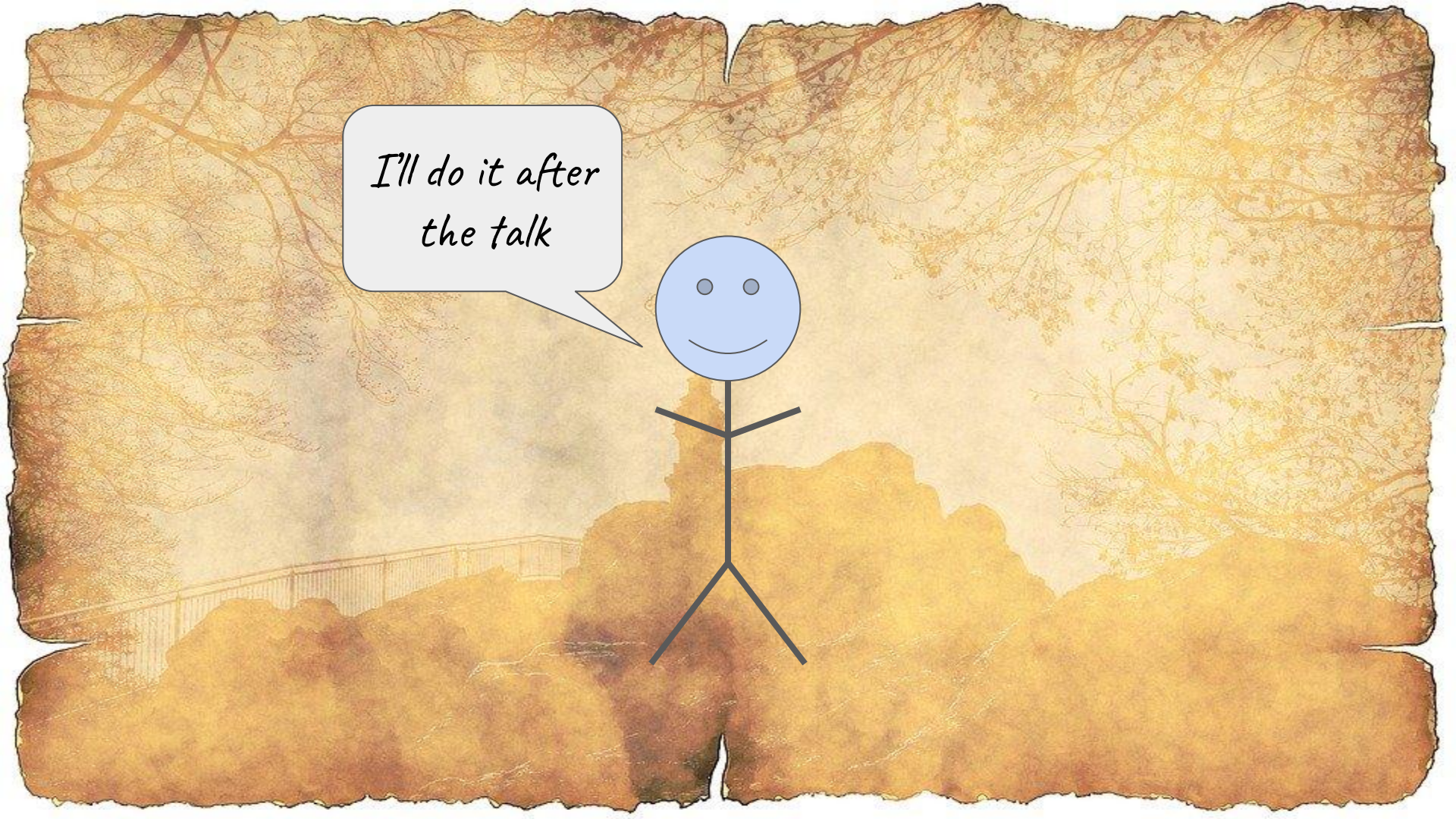
I should
OPTIMISE IT



No

*I don't
have time*





*I'll do it after
the talk*

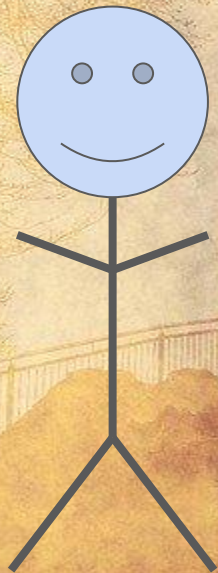


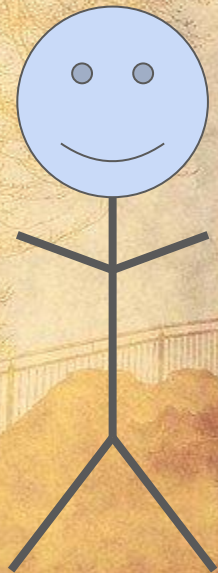
**One
Eternity
Later**

A large, stylized sad face is centered on the page. The face is composed of two grey circles for eyes and a simple downward-curving line for a mouth. On the forehead of the face is a small, faint cross symbol. The face is set against a background of a torn, aged piece of paper with a warm, yellowish-brown color palette. The paper has a textured, fibrous appearance with some darker, reddish-brown veins. In the background, behind the face, there is a faint, misty illustration of a landscape. It shows a body of water, a distant shoreline with a fence, and a large, dark, rocky outcrop or island in the foreground. The overall mood is melancholic and contemplative.

I don't know how



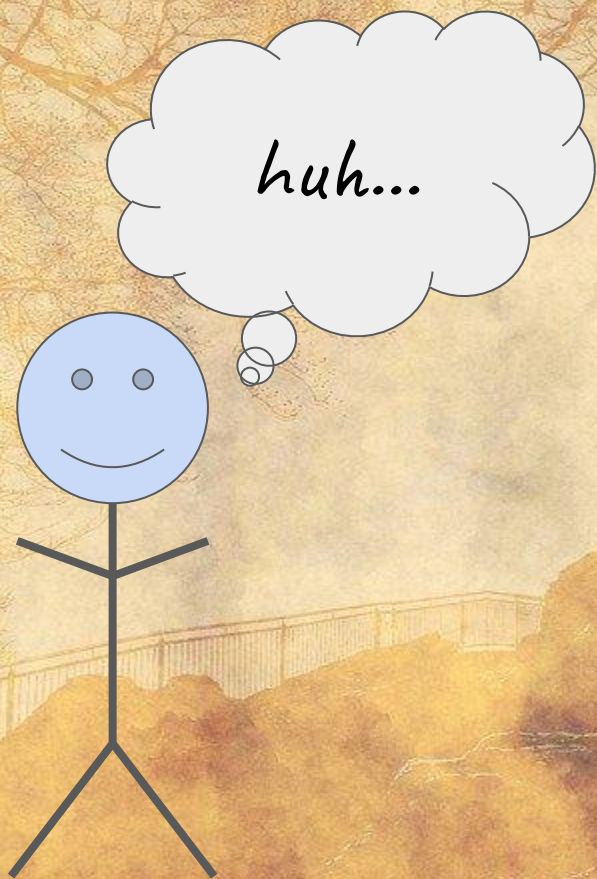


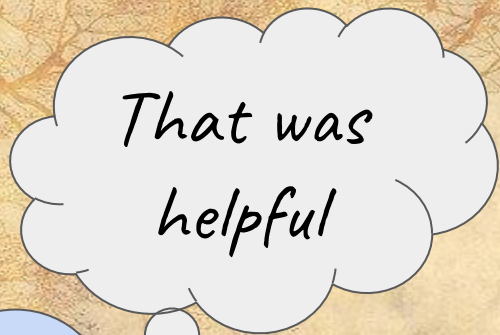
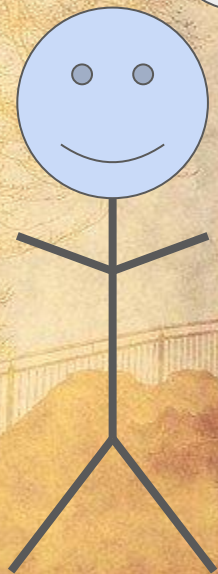


*Thanks for
coming to my
tek talk
about svelte*



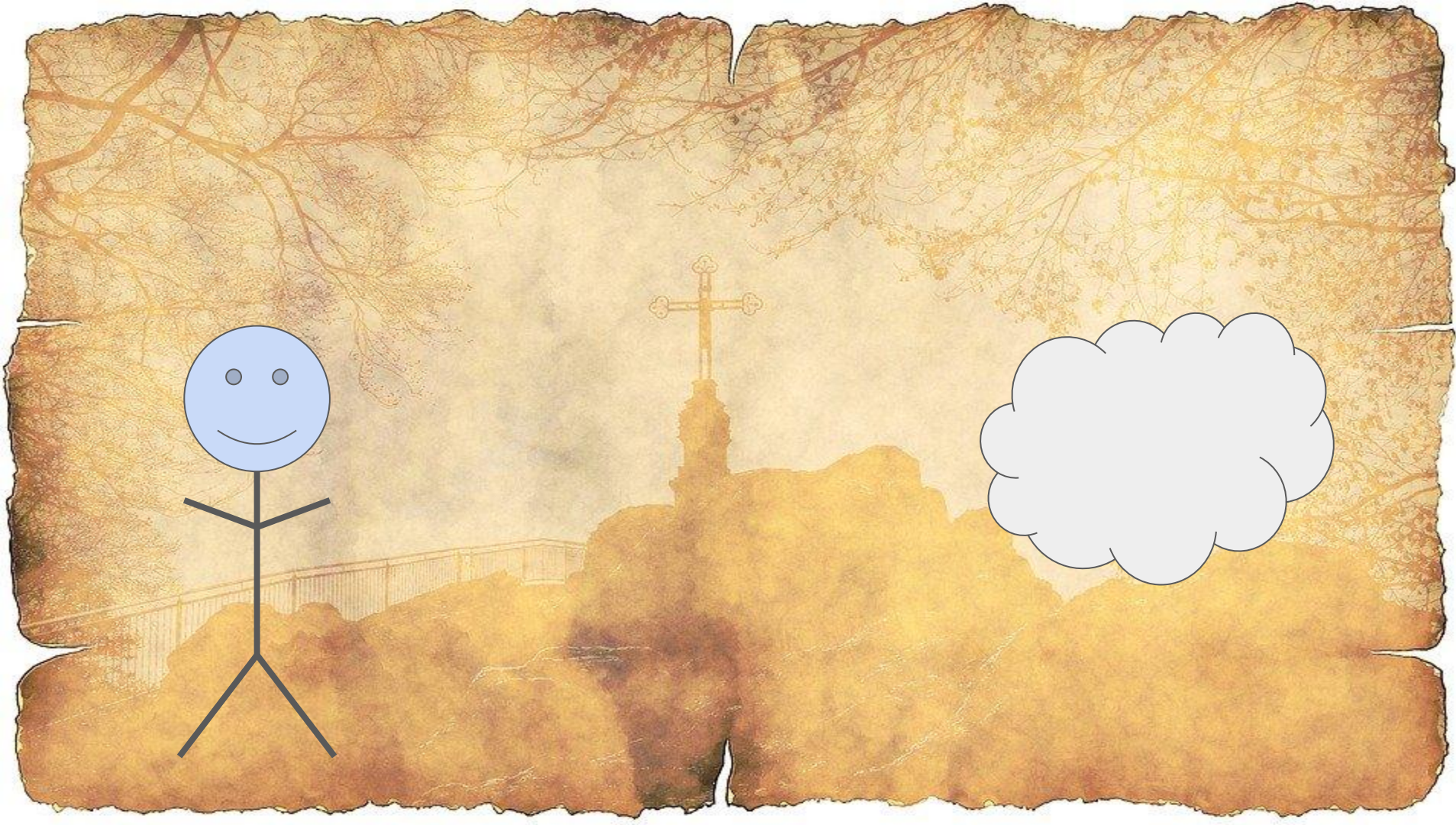


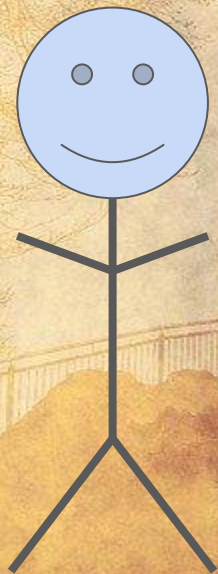


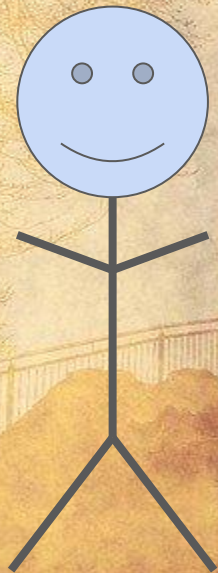


*That was
helpful*





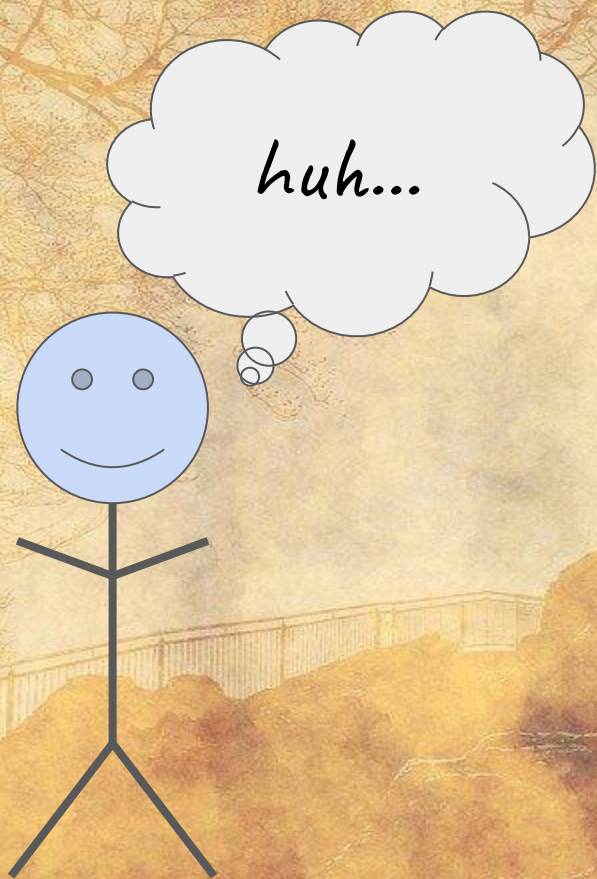


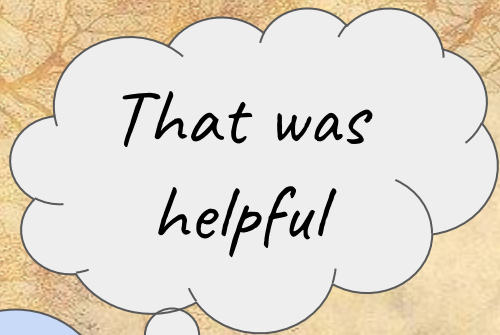
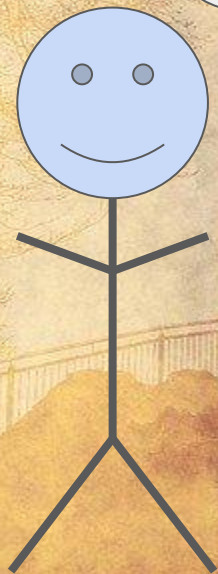


*Thanks for
coming to my tek
talk about web
optimisation*

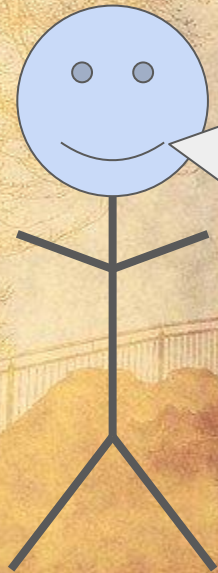




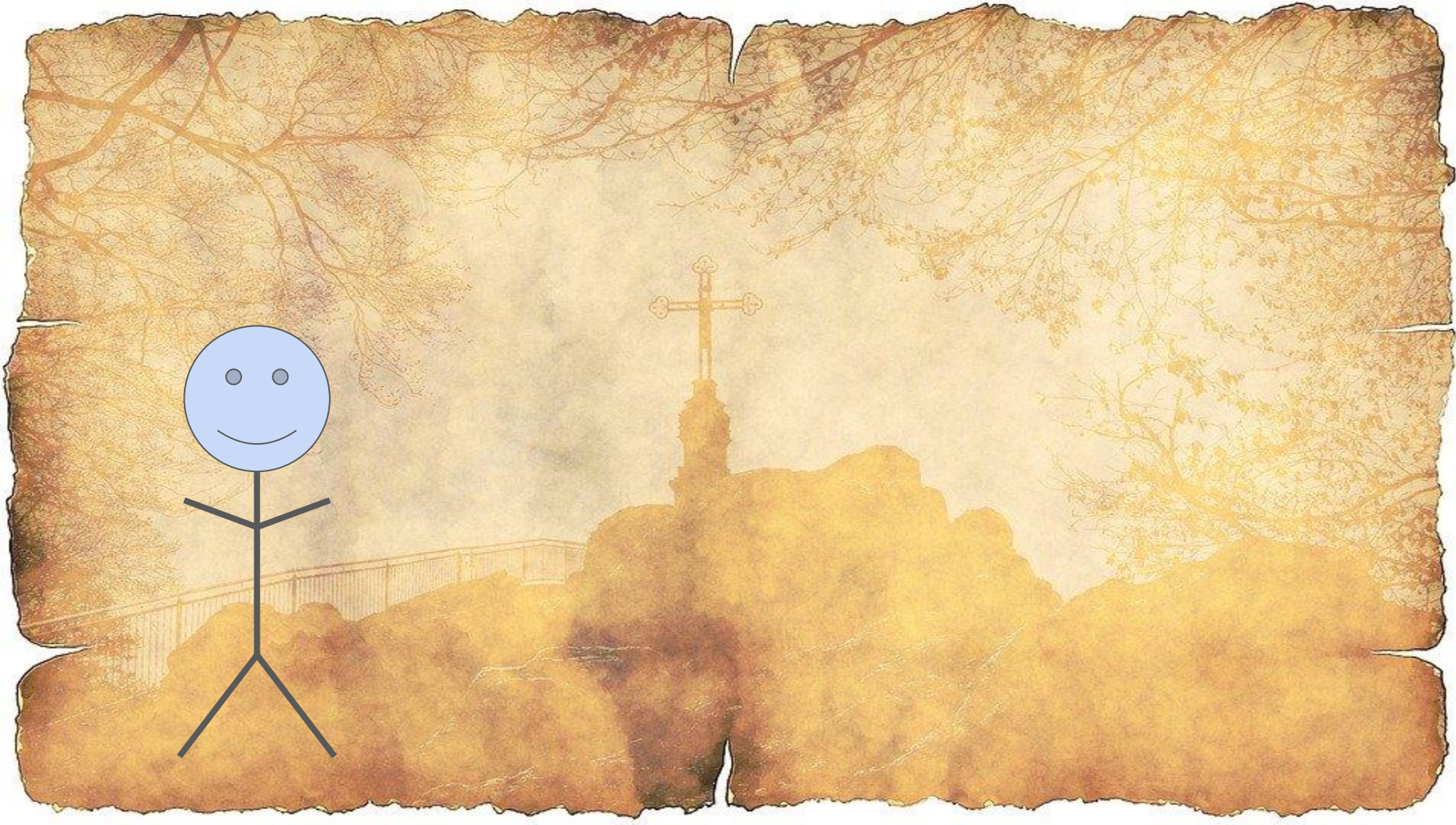


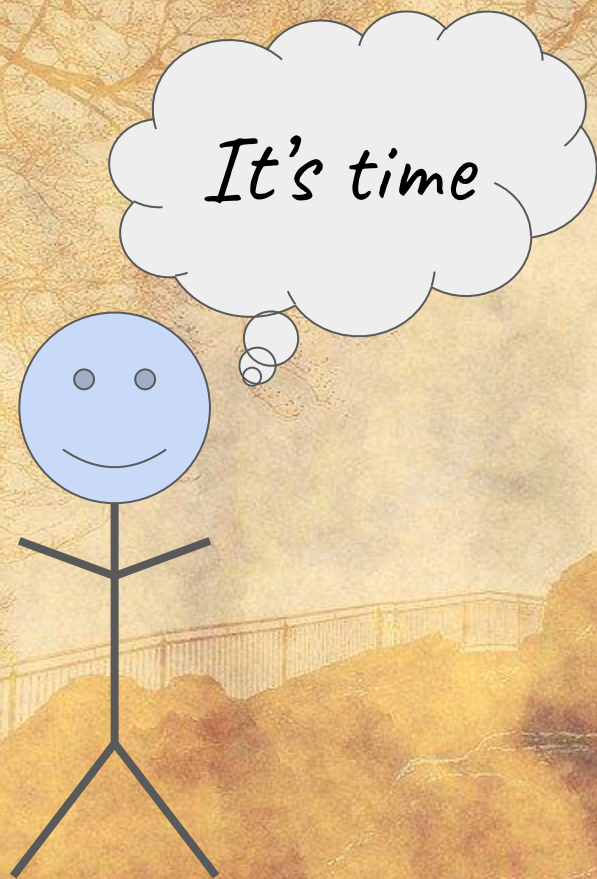


*That was
helpful*



*Thanks guys
your talks
were really
helpful*






It's time




The Plan

The background is a watercolor illustration of a landscape. In the foreground, there are large, dark, textured shapes that look like rocks or dense foliage. In the middle ground, a bridge with a railing spans across the scene. In the background, a tall, thin tower or spire rises into the sky. The entire scene is overlaid with a parchment-like texture, featuring various shades of brown, tan, and yellow. A white scroll with a black border is positioned in the upper center, containing the title.

The Plan

- 1. Reimplement the app in Svelte*

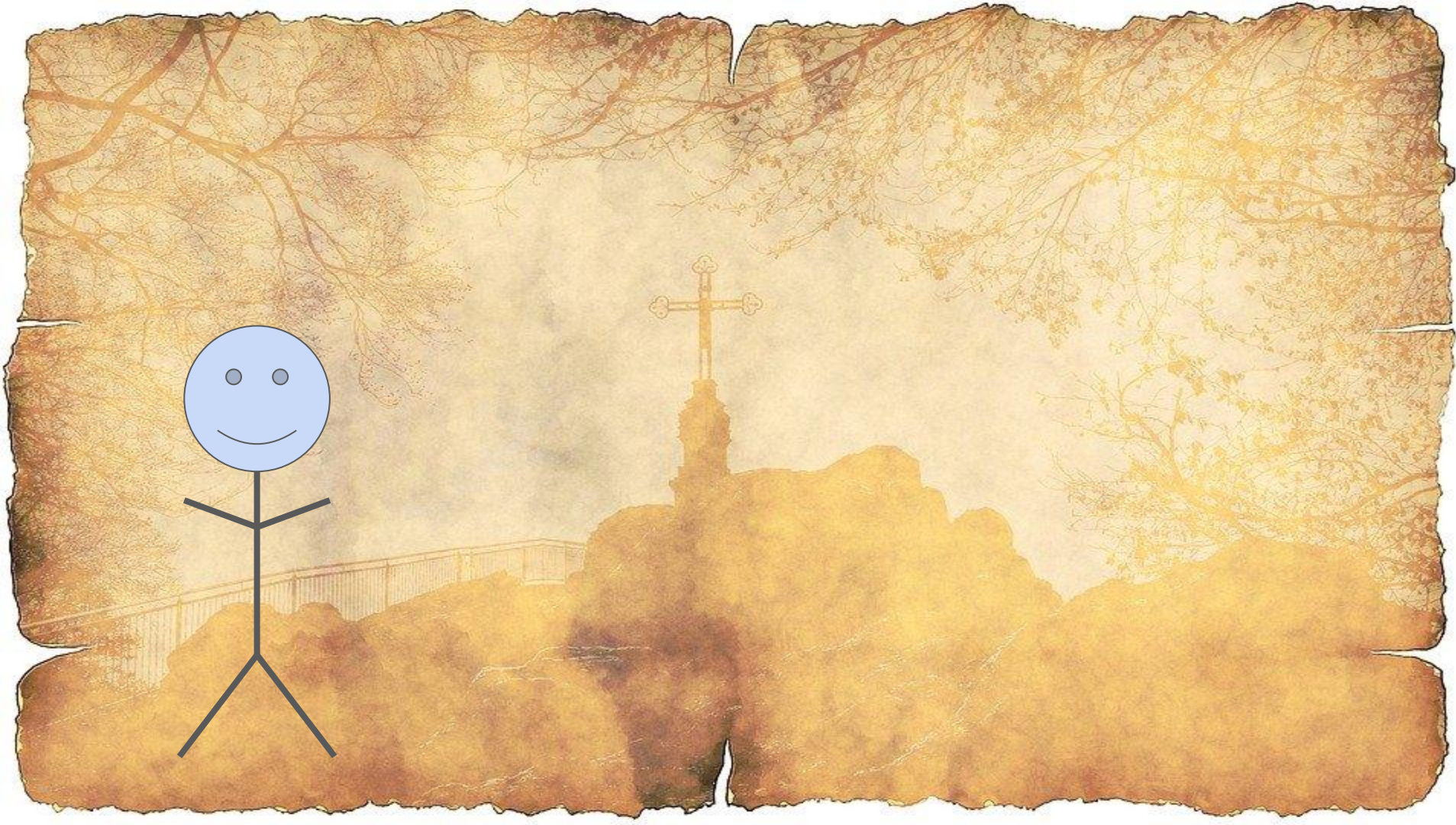


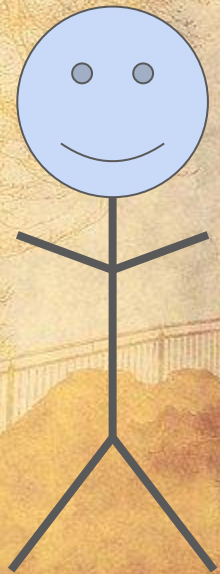
The Plan

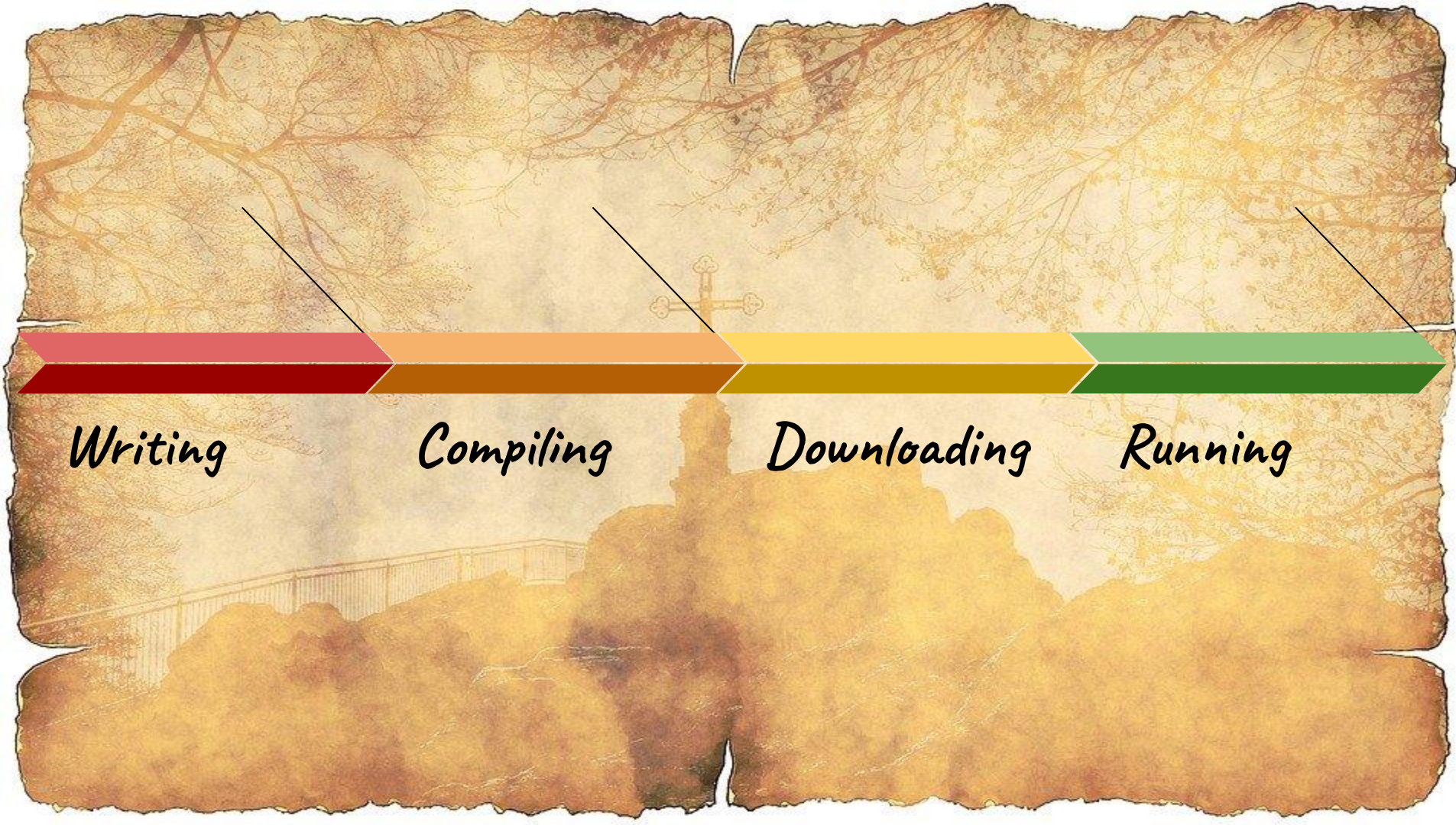
- 1. Reimplement the app in Svelte*
- 2. ...*

The Plan

1. Reimplement the app in Svelte
2. ...
3. Profit!







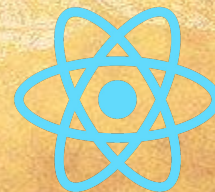
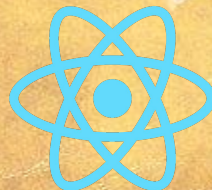


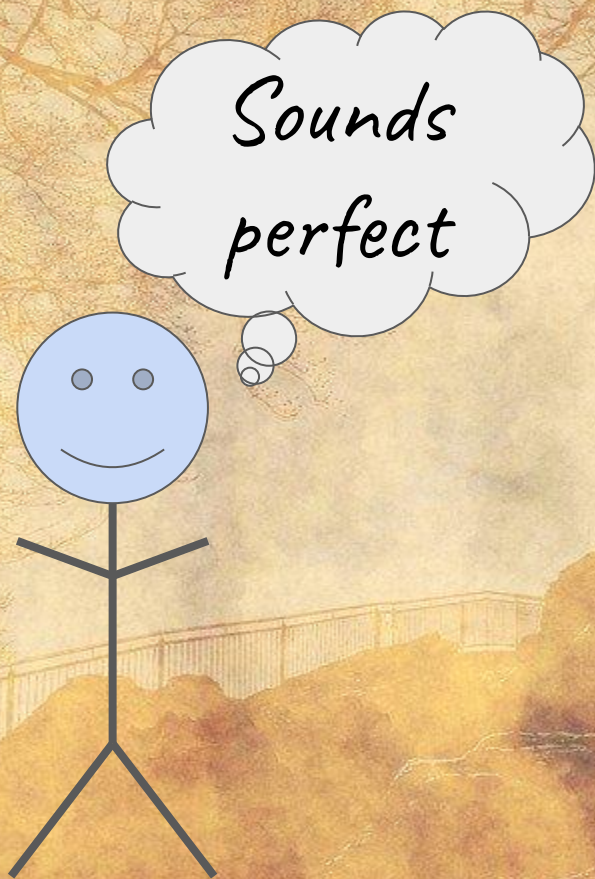
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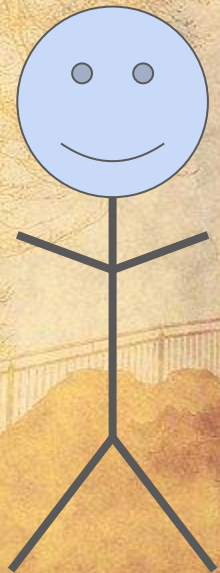
Compiling

Downloading

Running

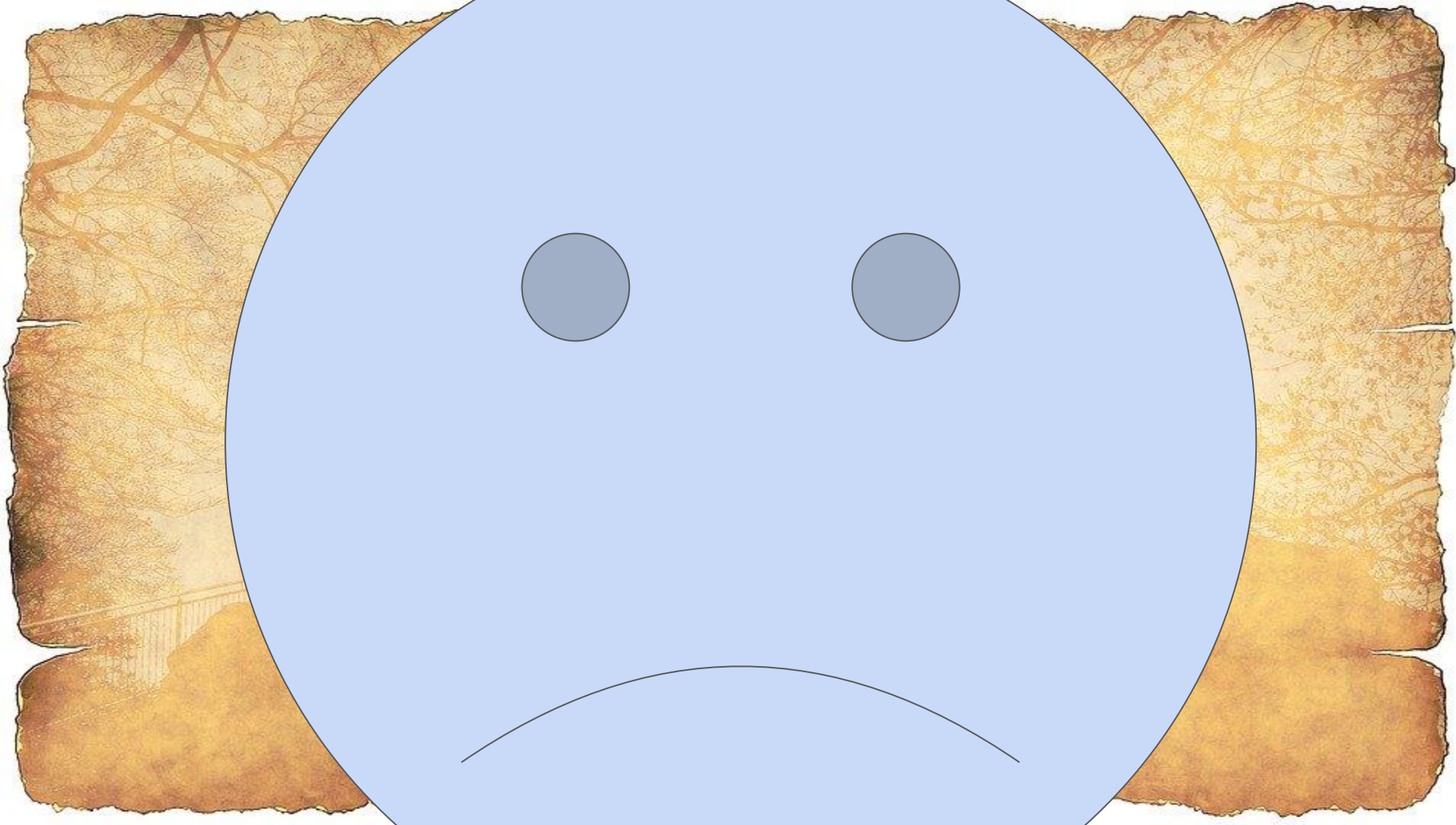






A watercolor illustration of a cemetery scene. In the center, a cross stands on a small hill. To the left, a fence runs along a path. Bare, leafless trees with intricate branch structures frame the top and sides of the scene. The bottom of the image is filled with large, textured brushstrokes in shades of yellow and brown, suggesting grass or foliage. The overall style is soft and painterly, with a warm, autumnal color palette.

Results

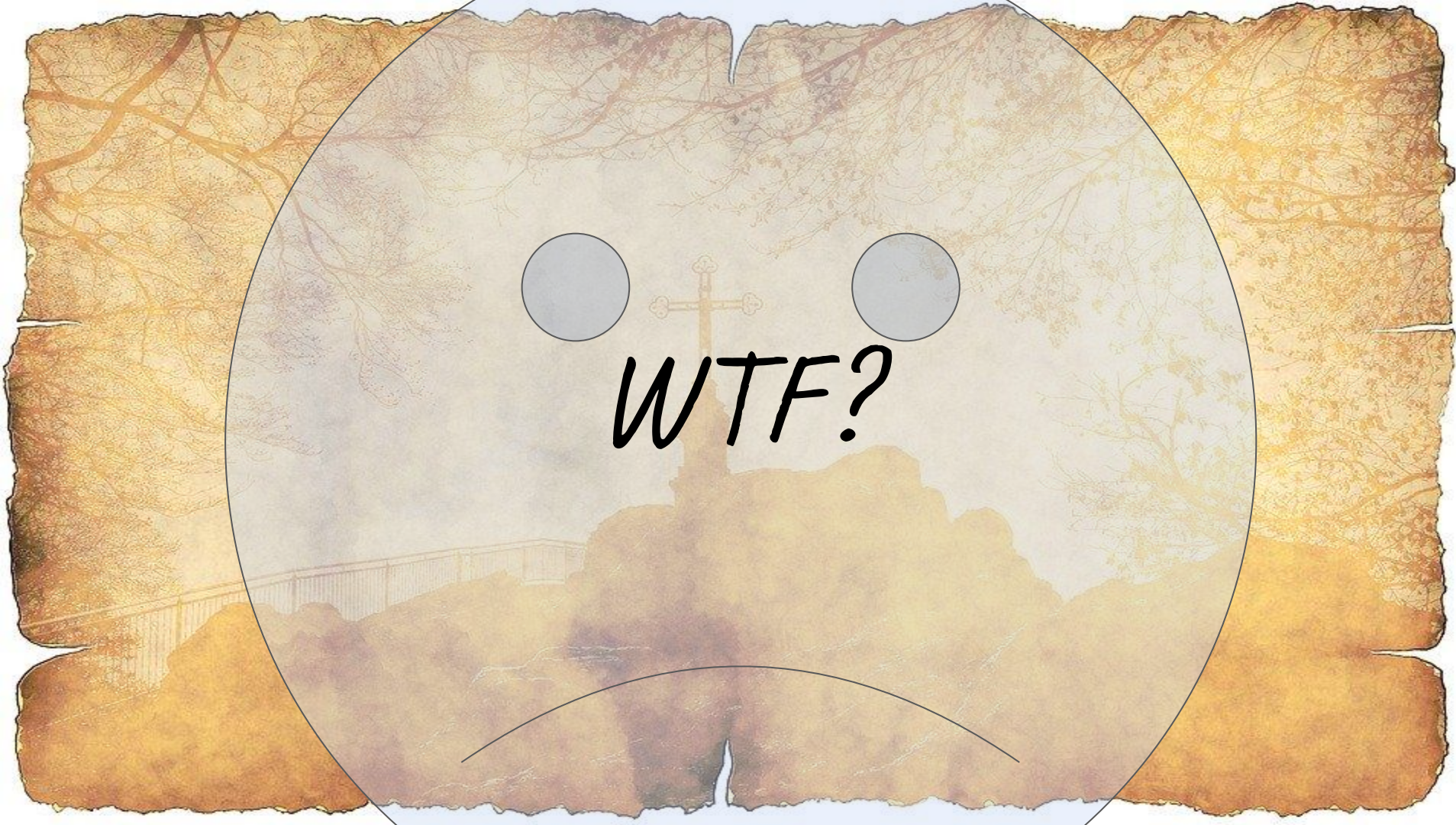


A large, stylized sad face is centered on the page. The face is composed of a large, light-colored oval with a thin black outline. Inside the oval, there are two small, solid gray circles for eyes. A thin black line forms a downward-curving arc for a mouth. On the forehead of the face, there is a small, faint cross symbol. The background of the entire image is a textured, mottled orange and yellow, resembling aged paper or parchment. The sad face is superimposed over this background.


Well that's embarrassing

The background is a textured, torn paper surface in shades of yellow, orange, and brown. In the center, a faint, golden cross is visible. Below the cross, a dark, silhouetted fence runs across the frame. The overall atmosphere is eerie and unsettling.

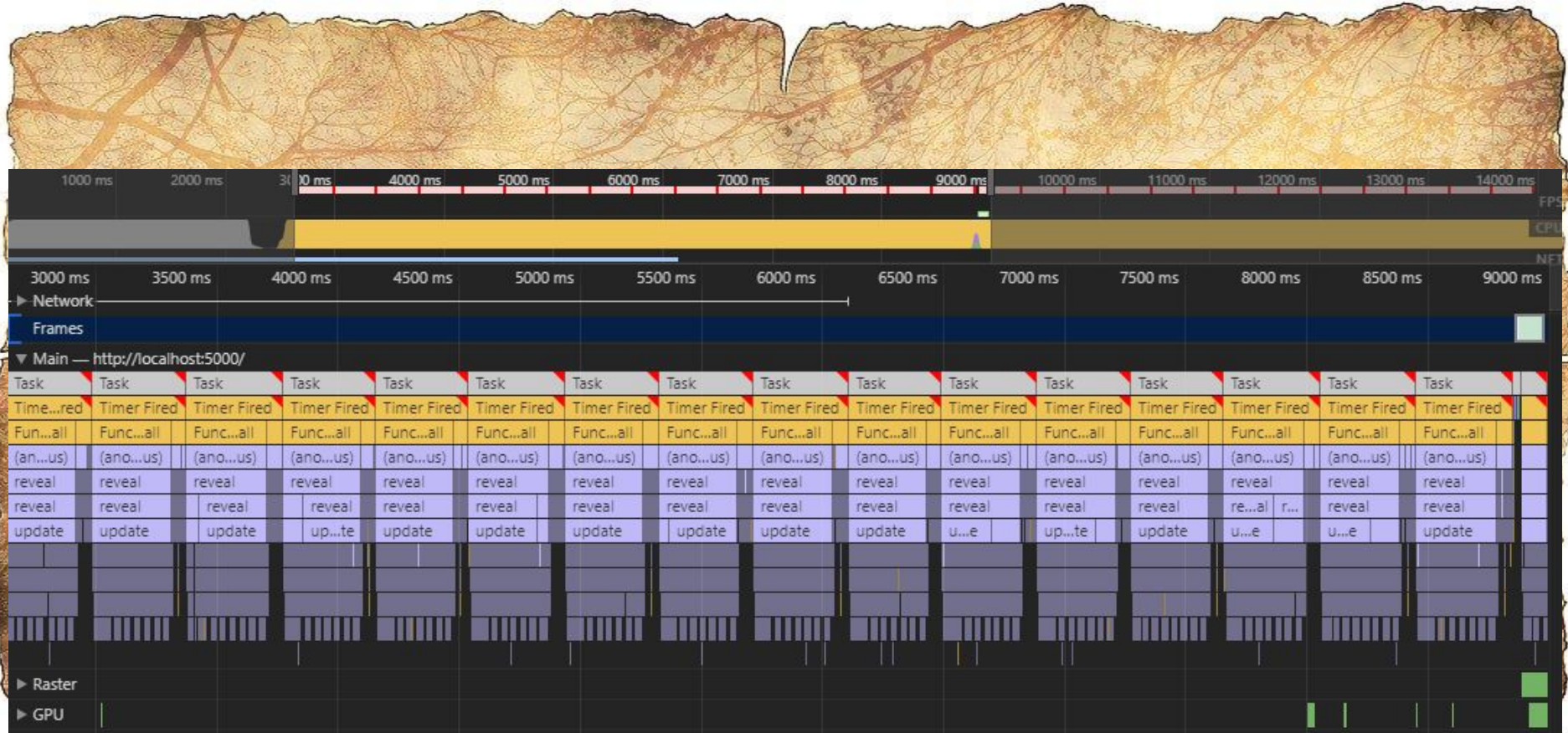
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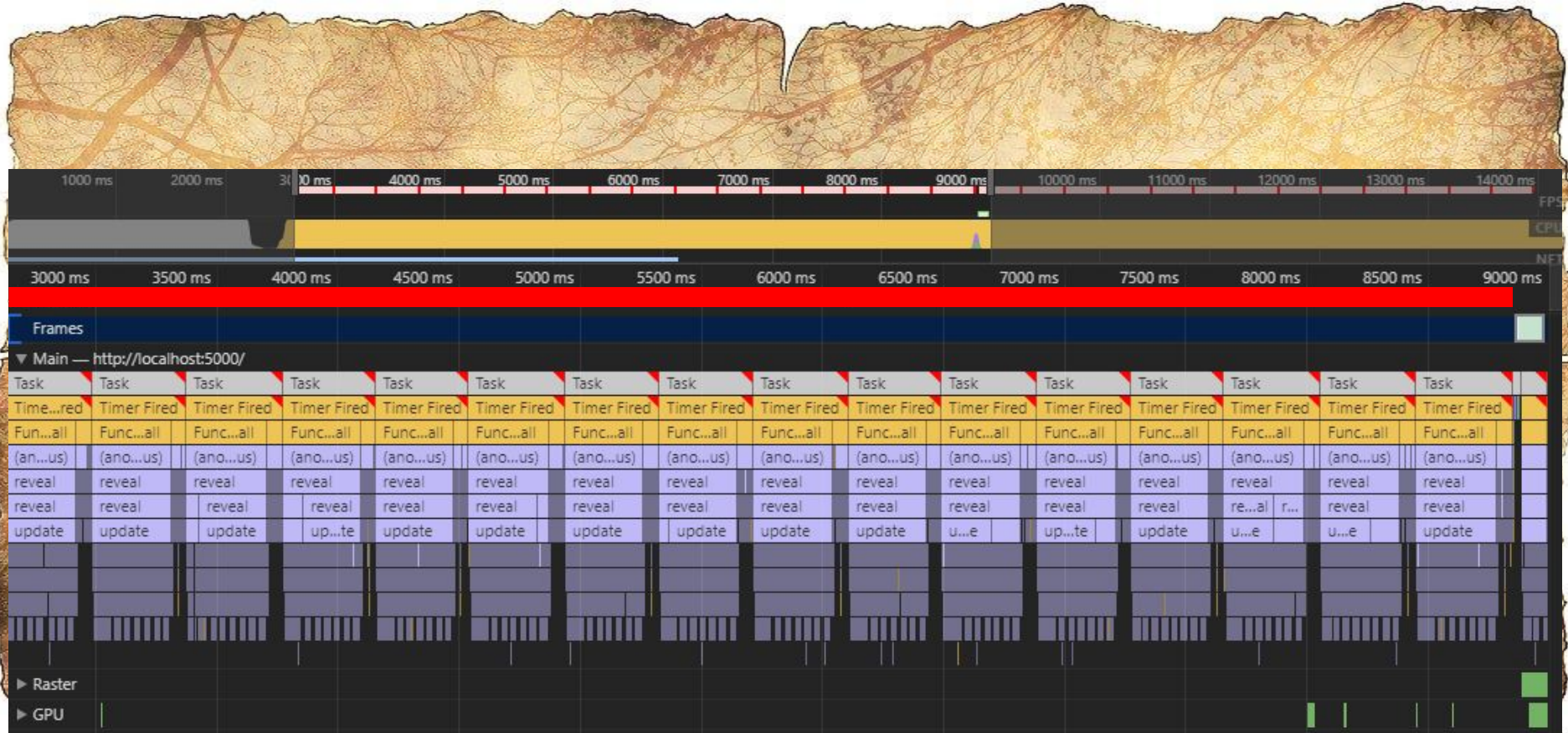


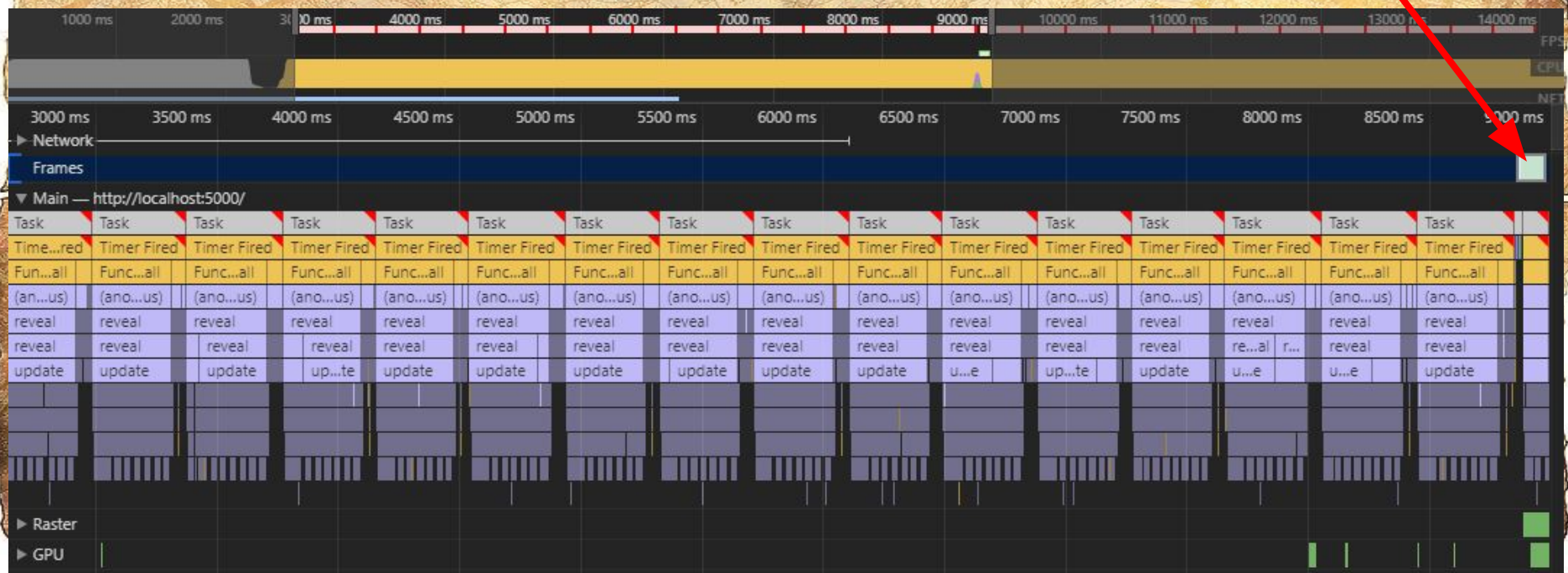
WTF?



Where Those Fps?



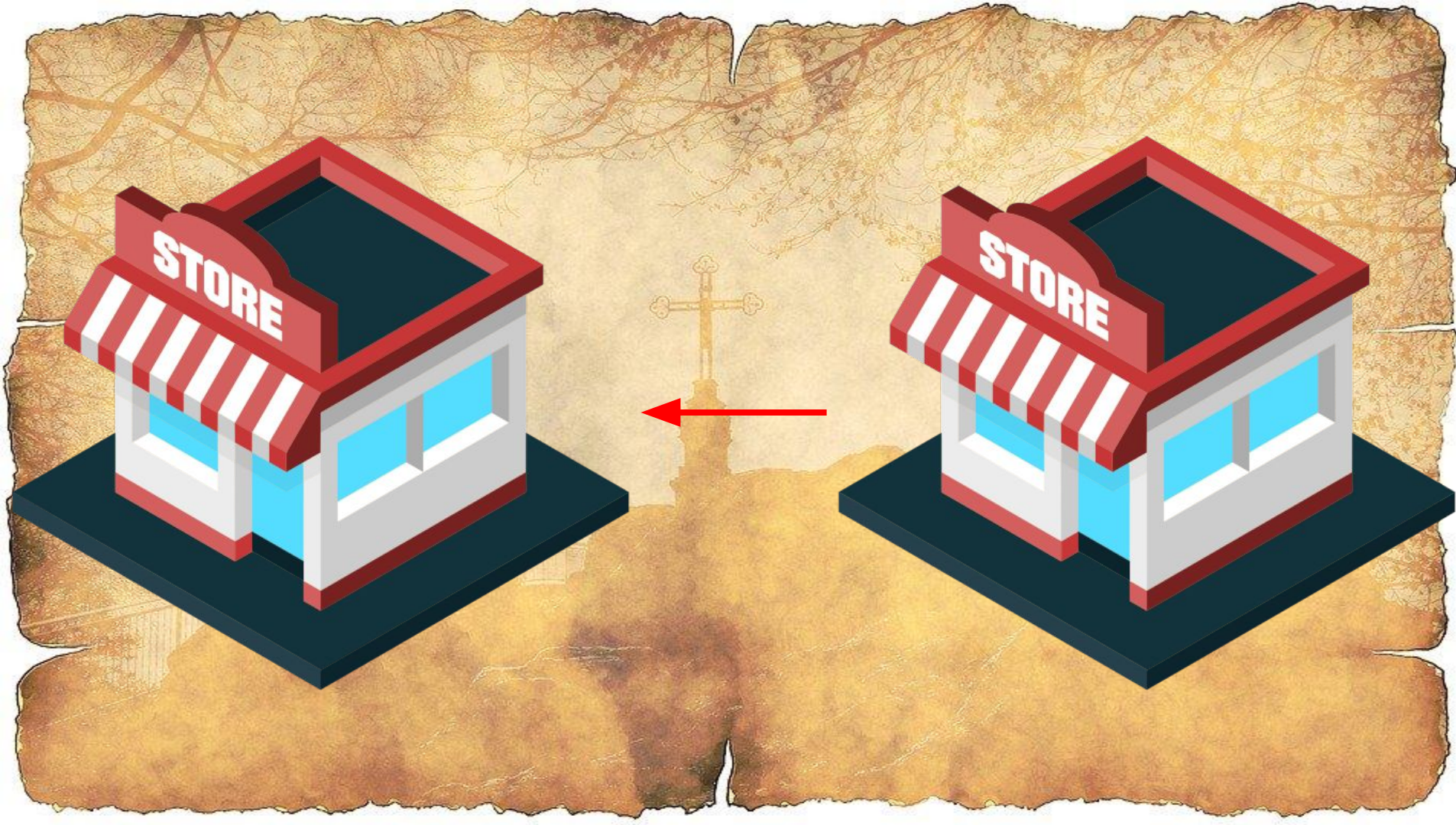






Component



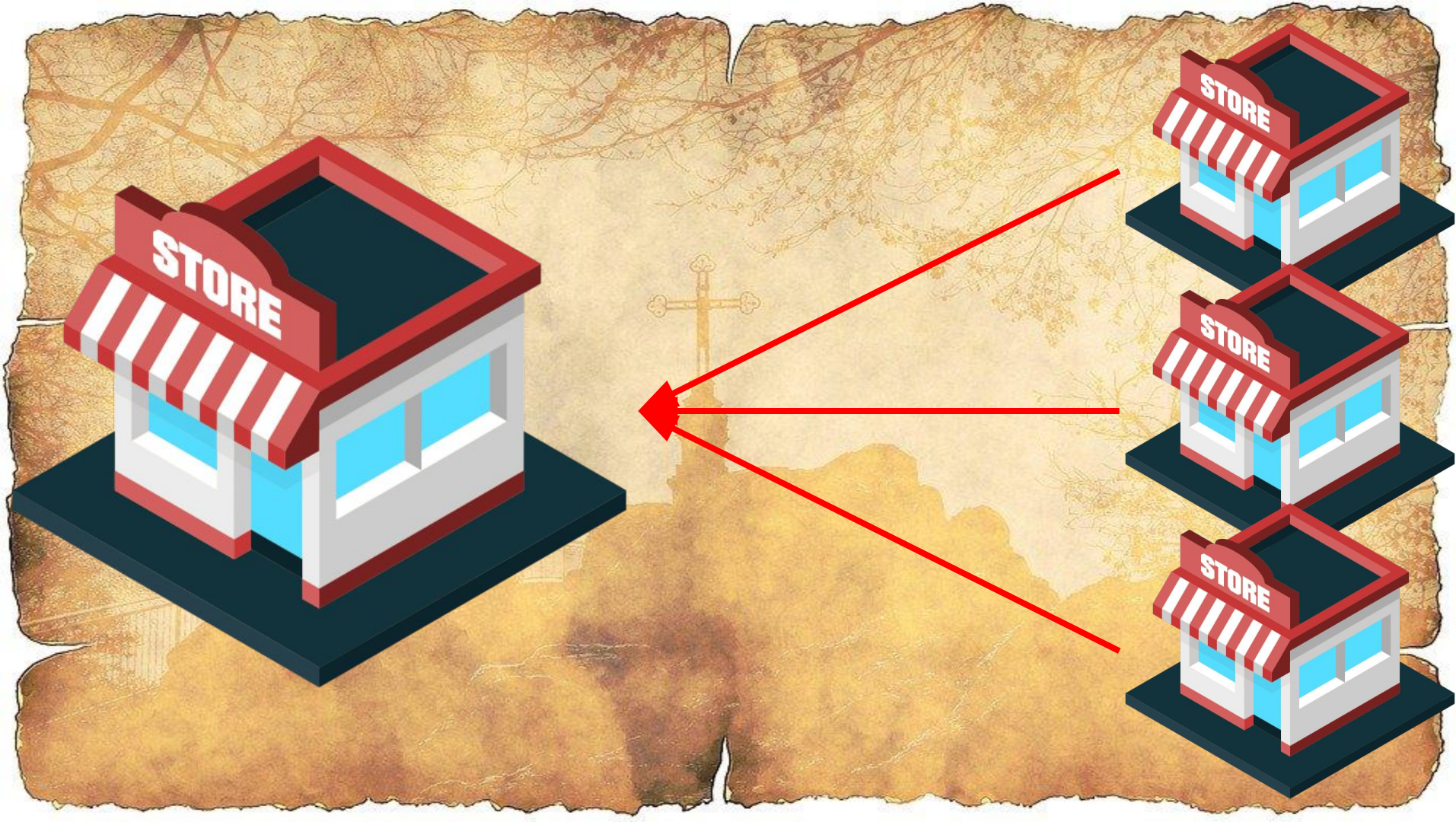


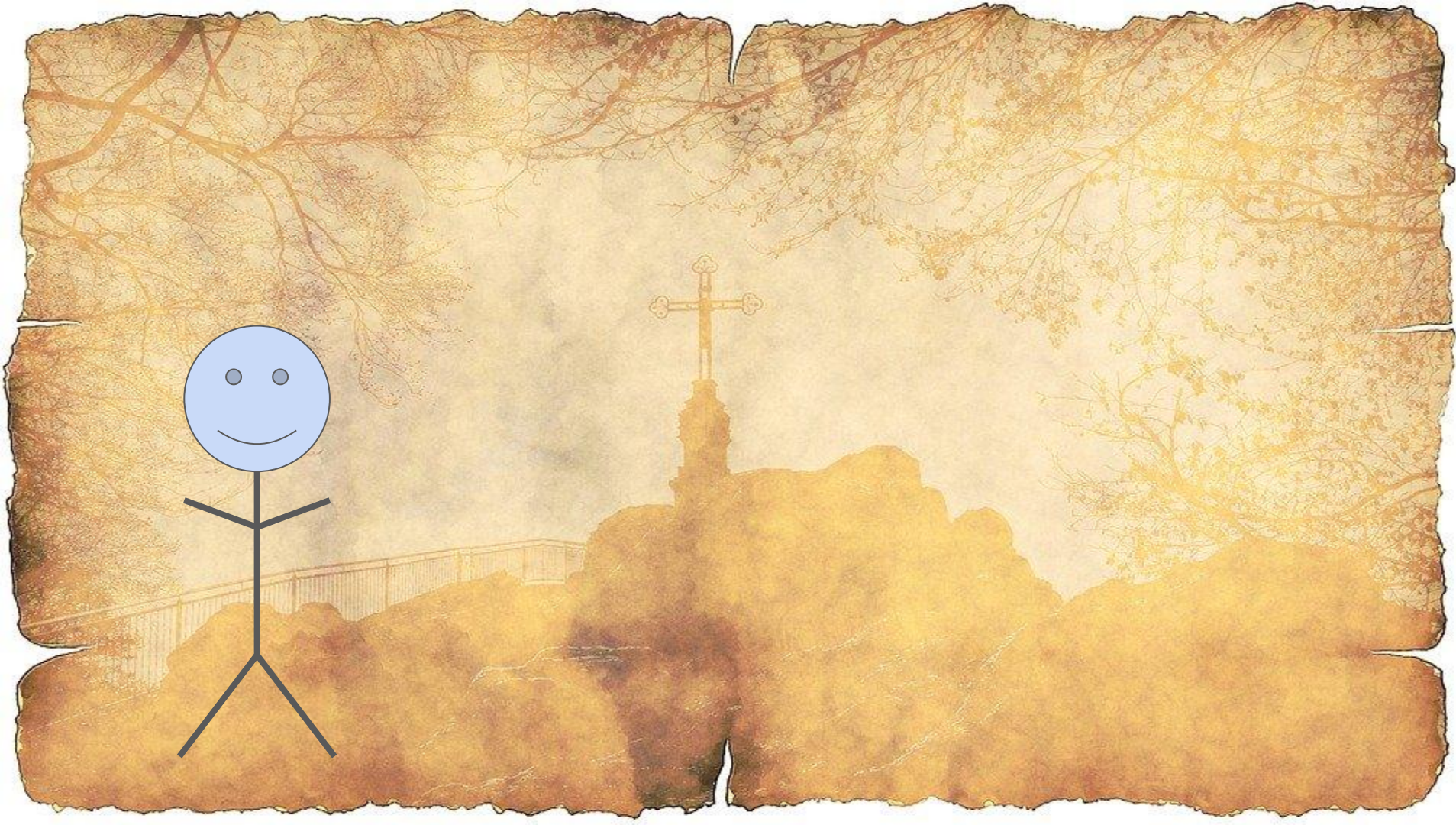
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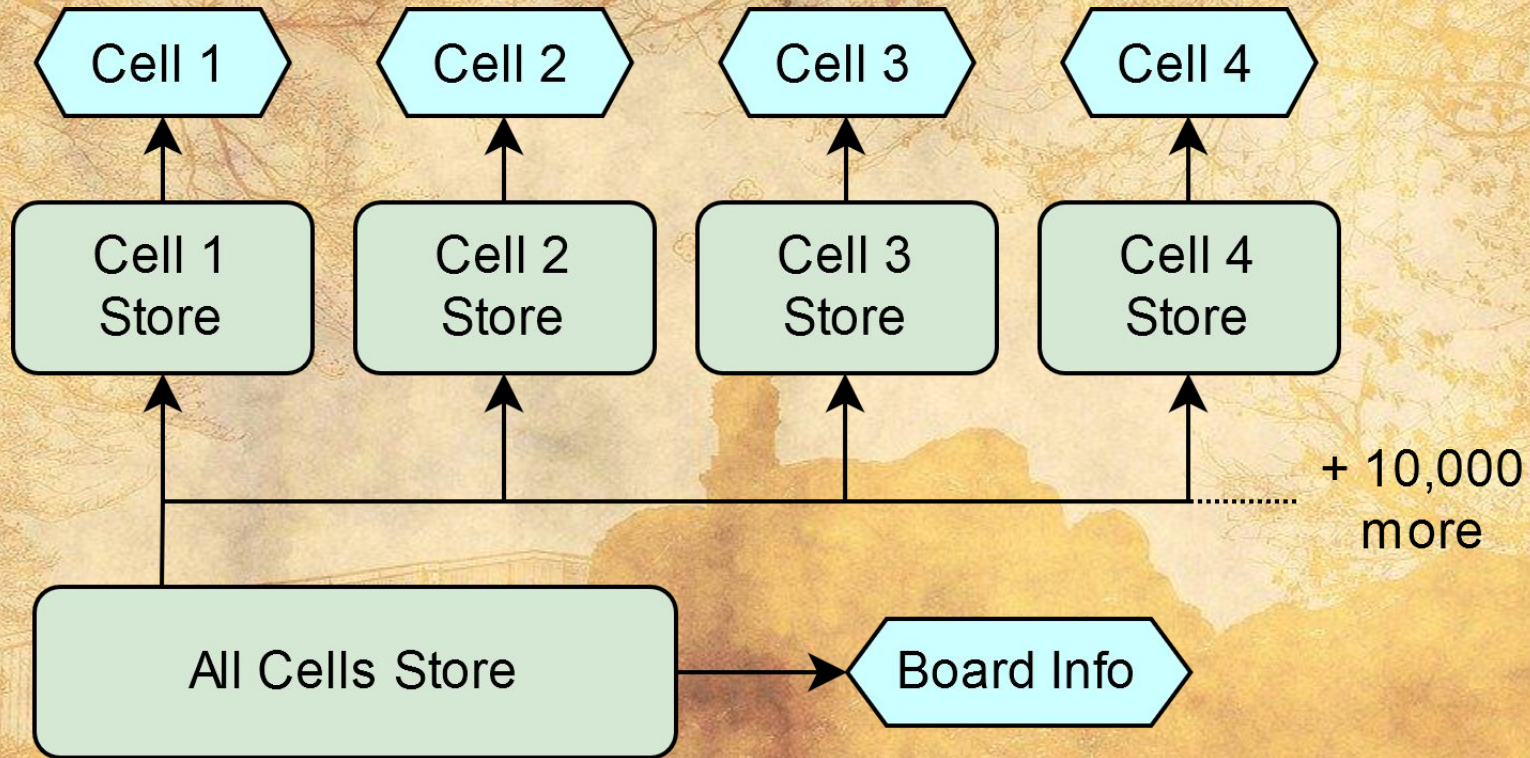
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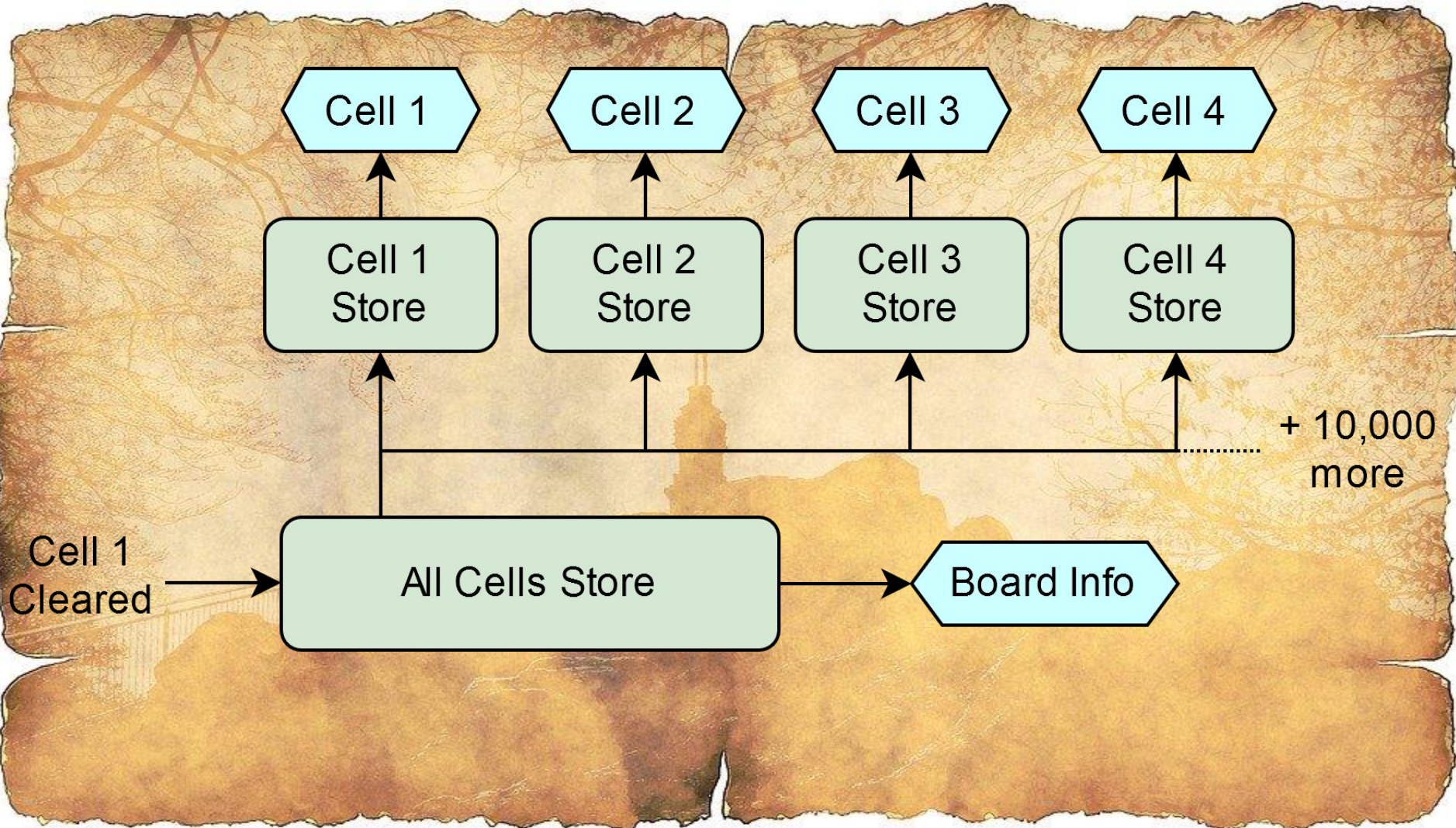
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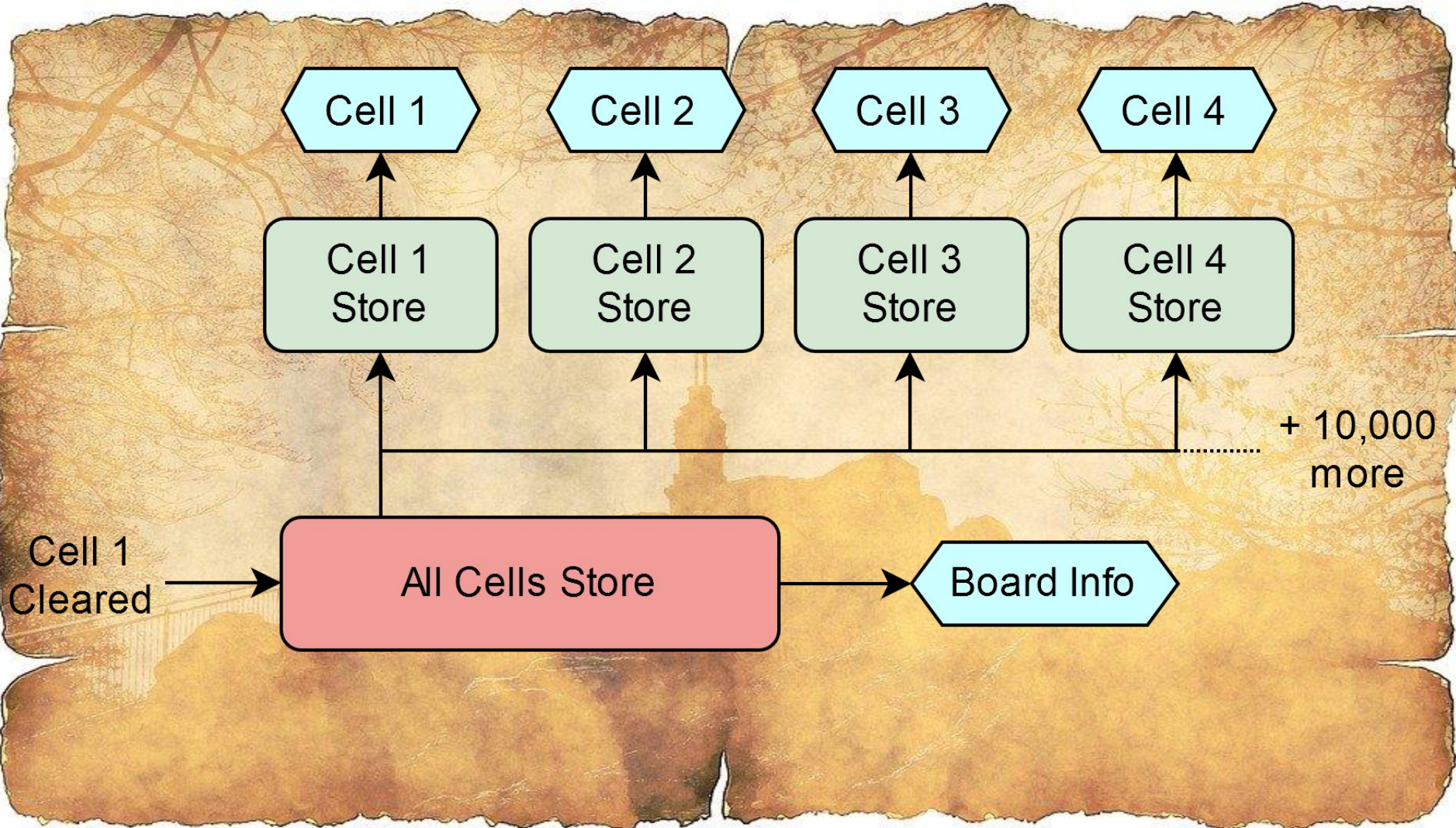


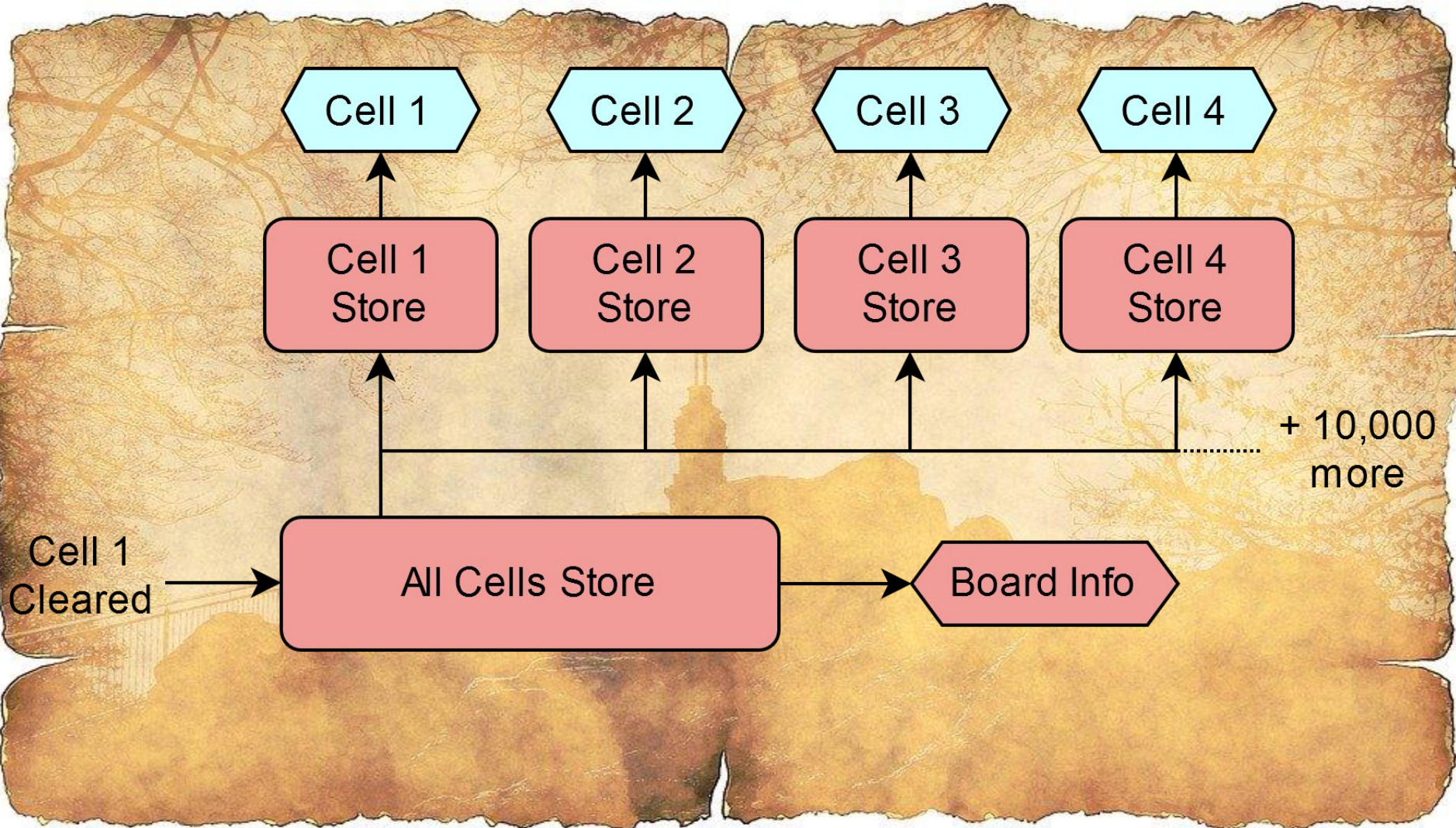


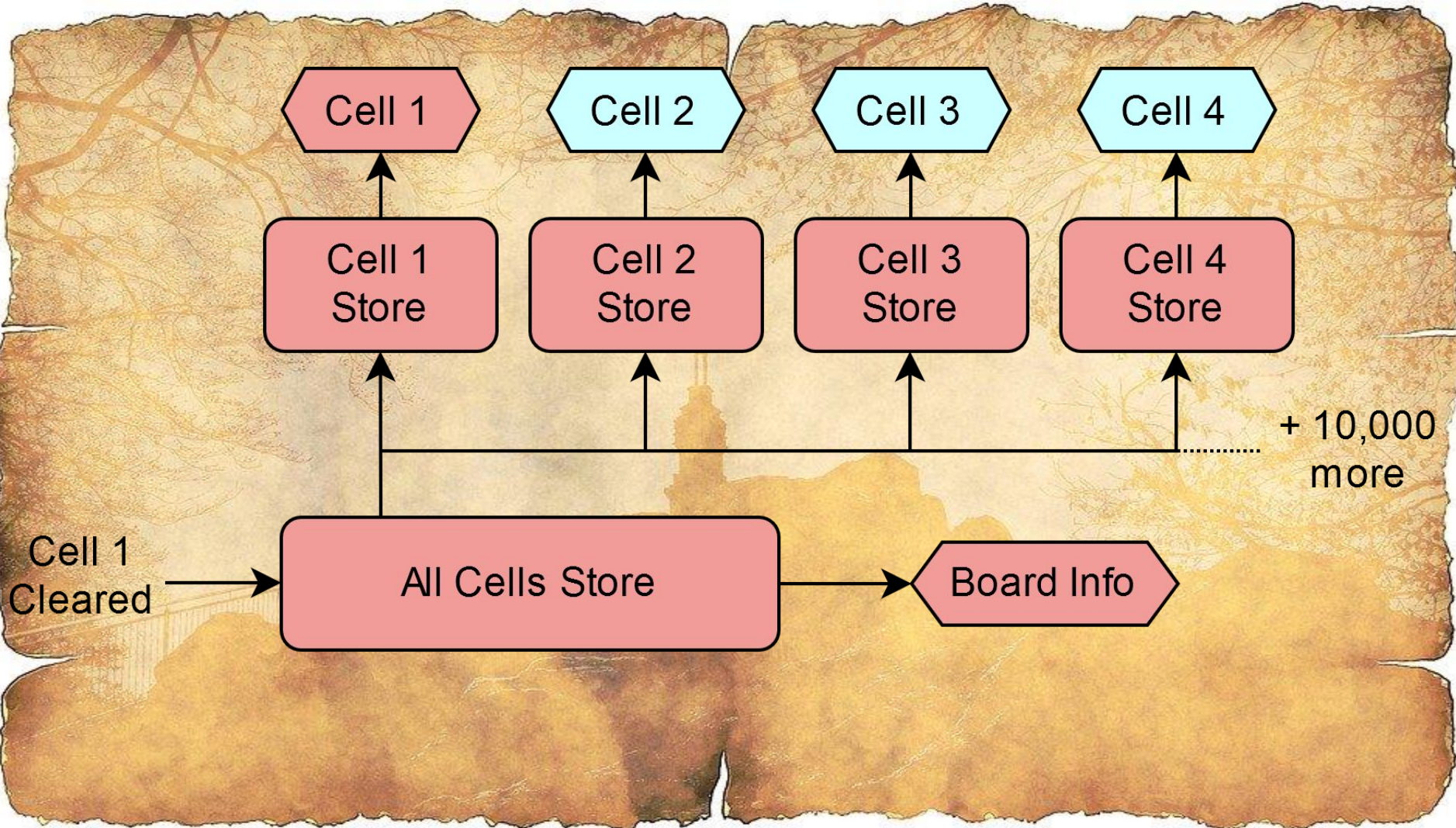


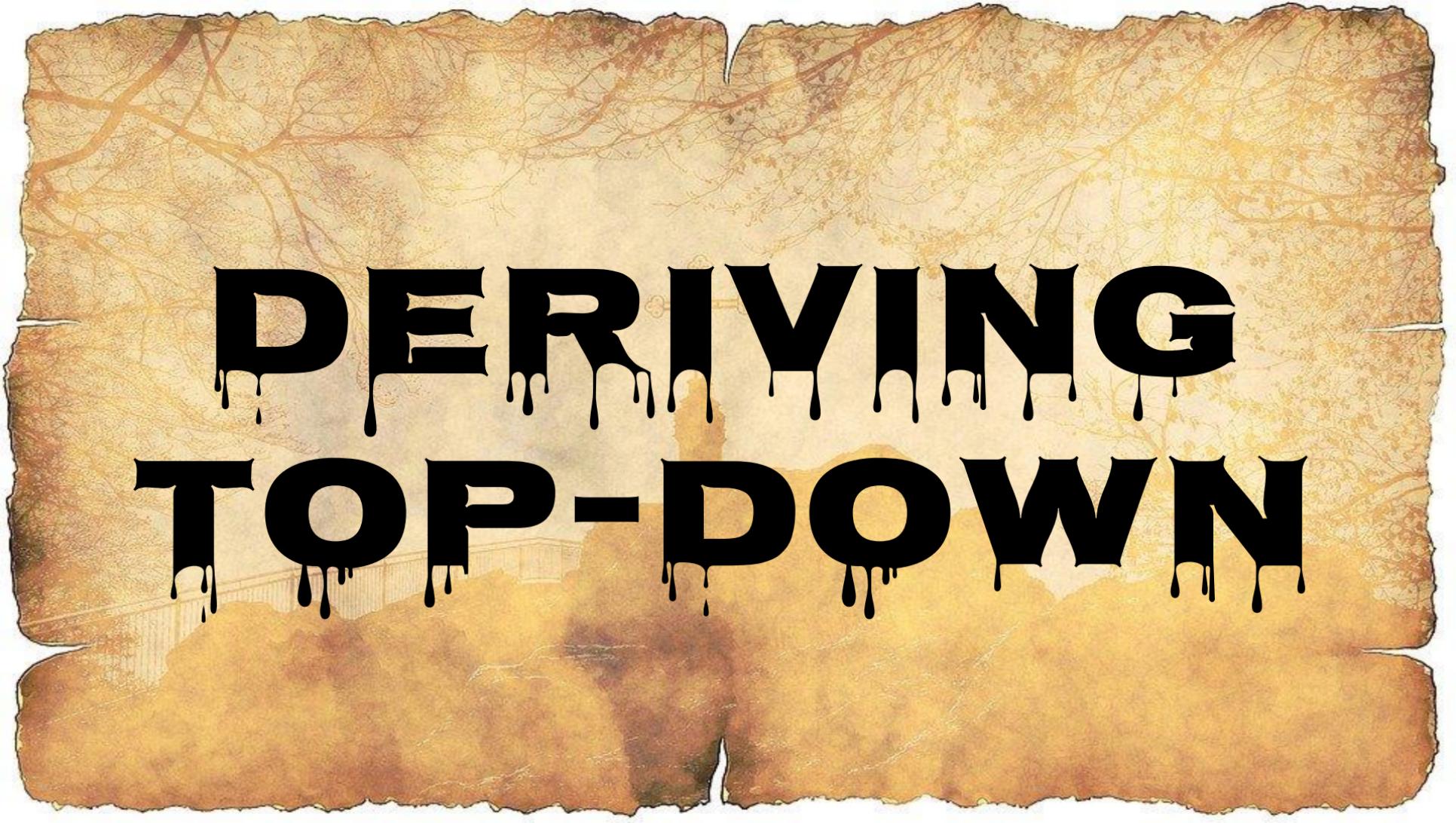




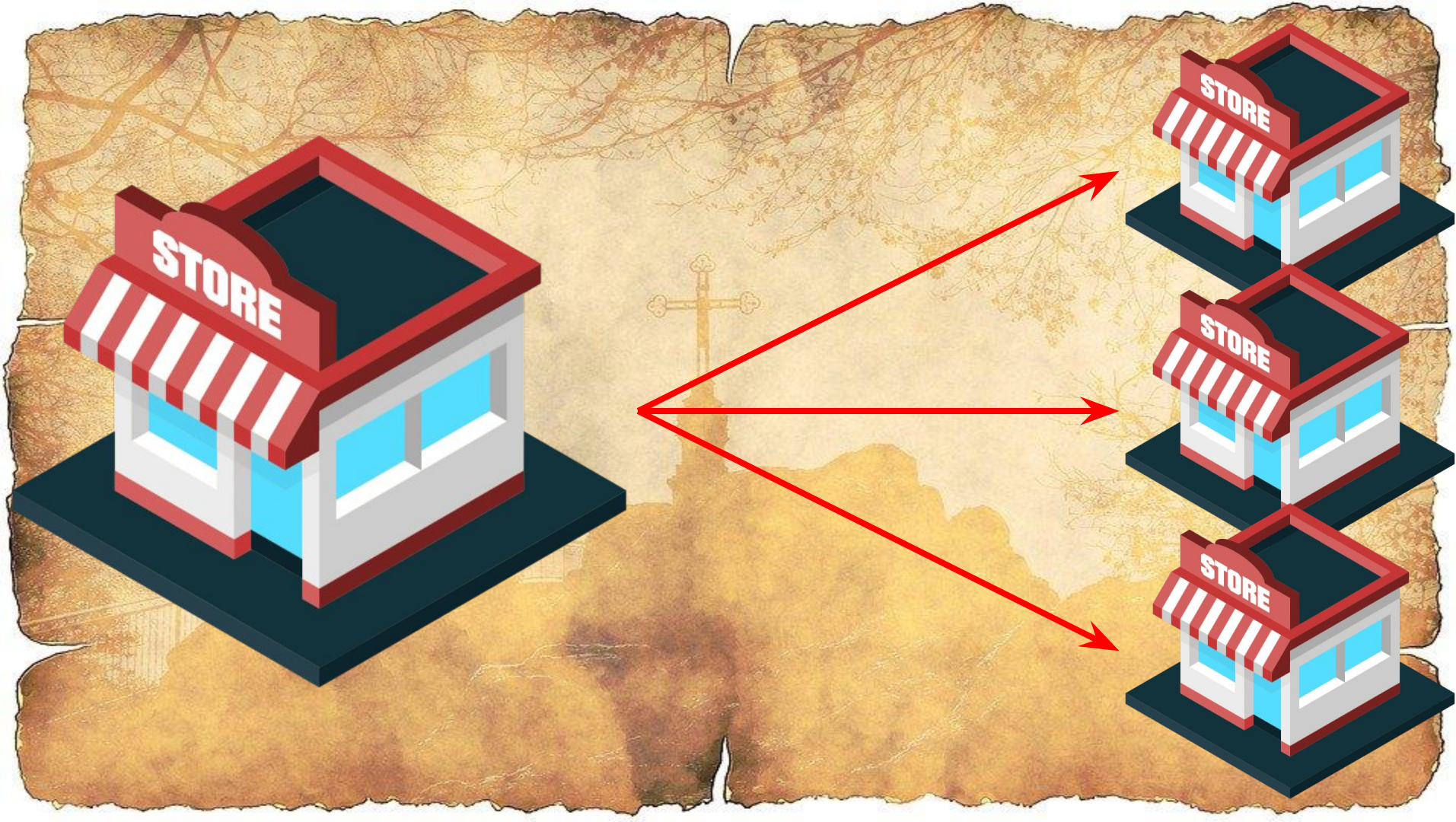


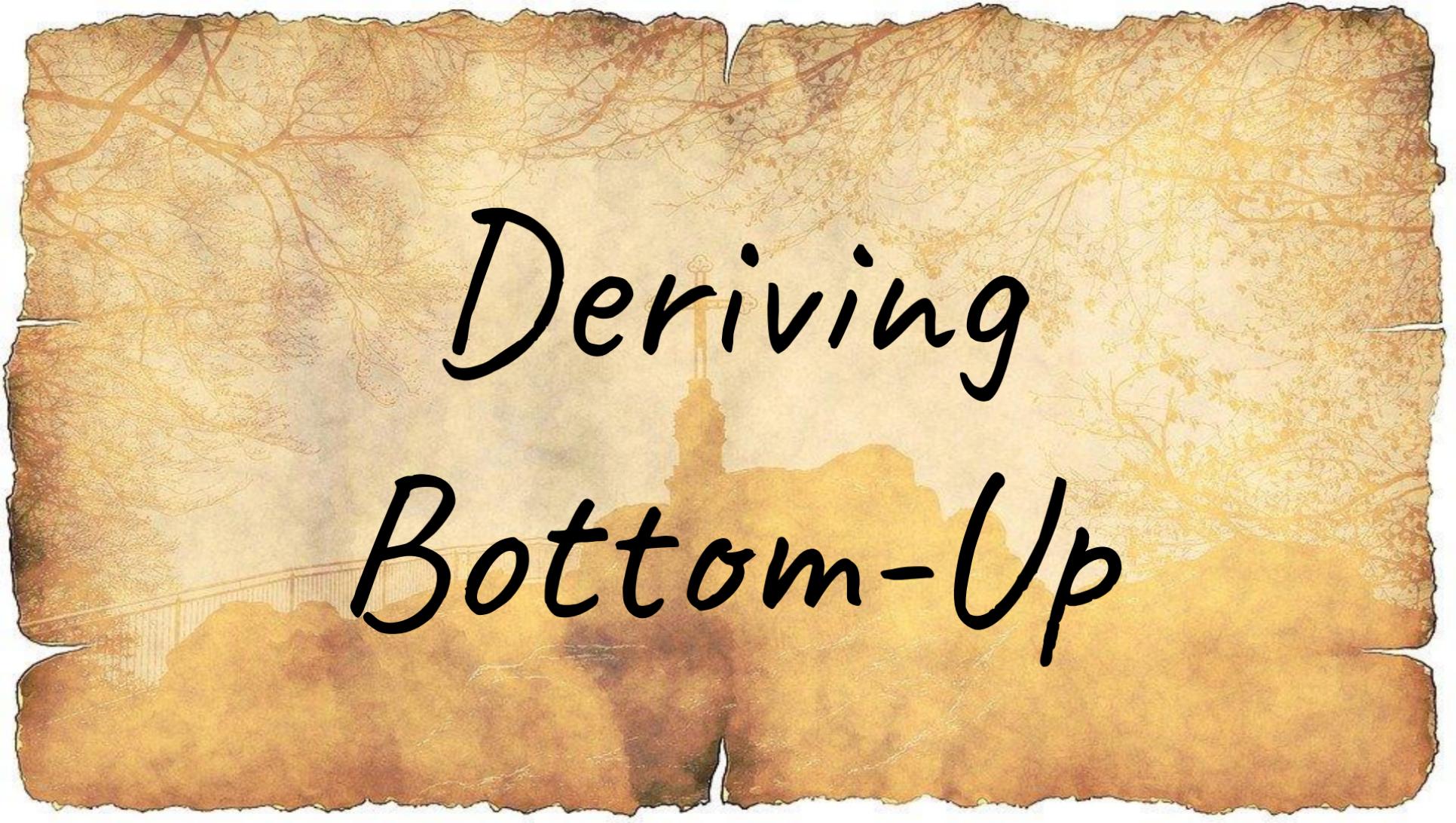




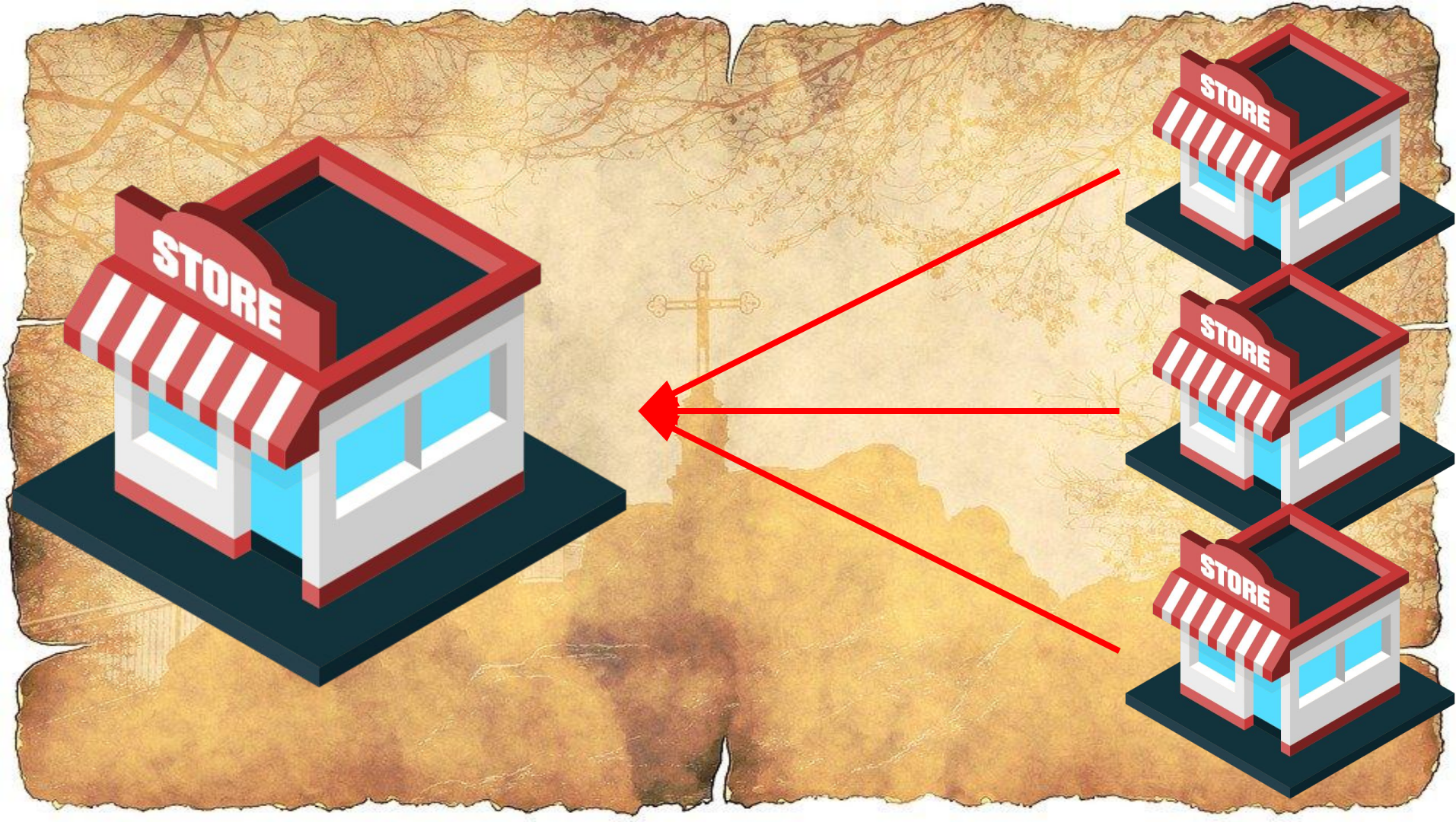


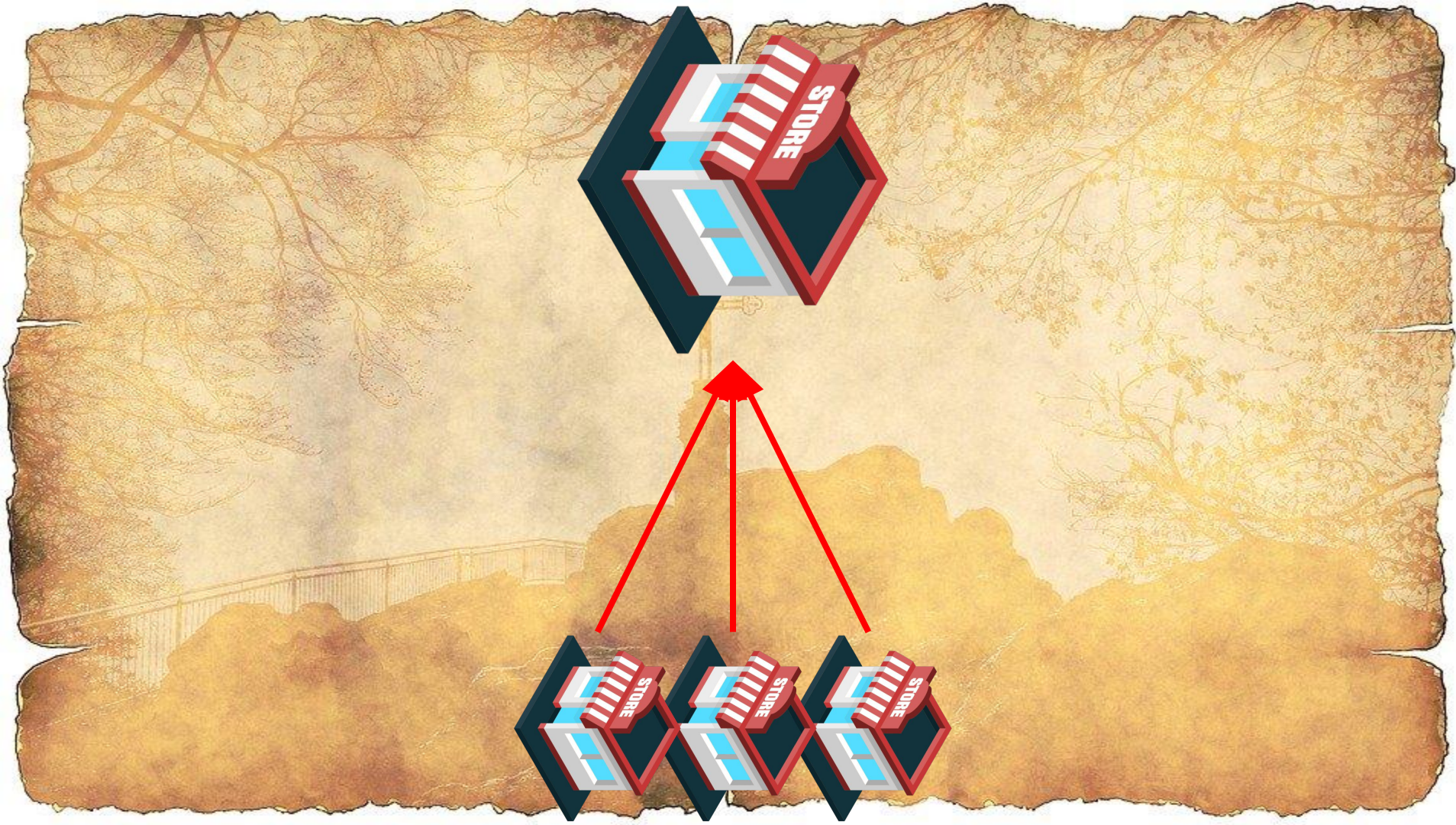
**DERIVING
TOP-DOWN**

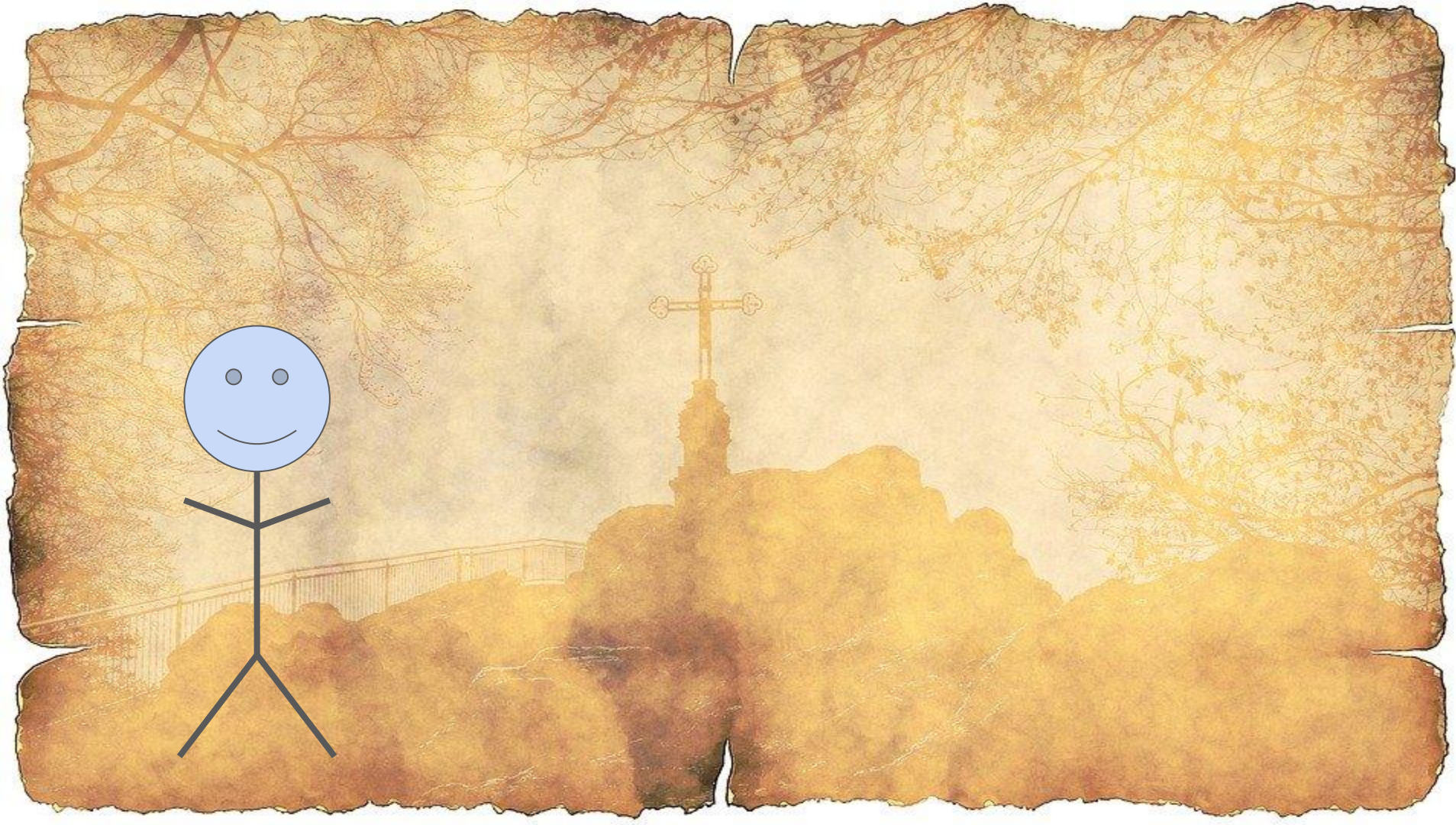


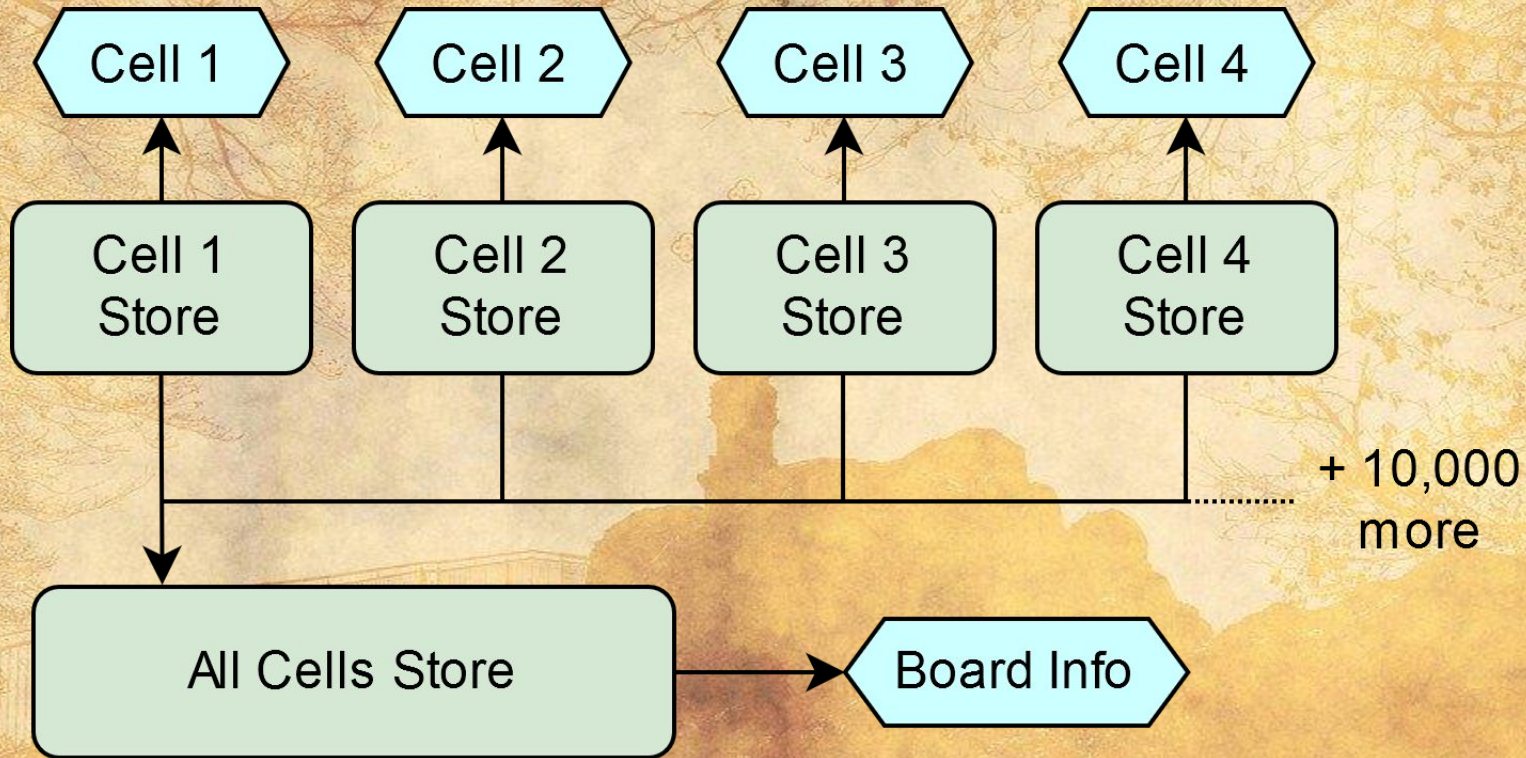


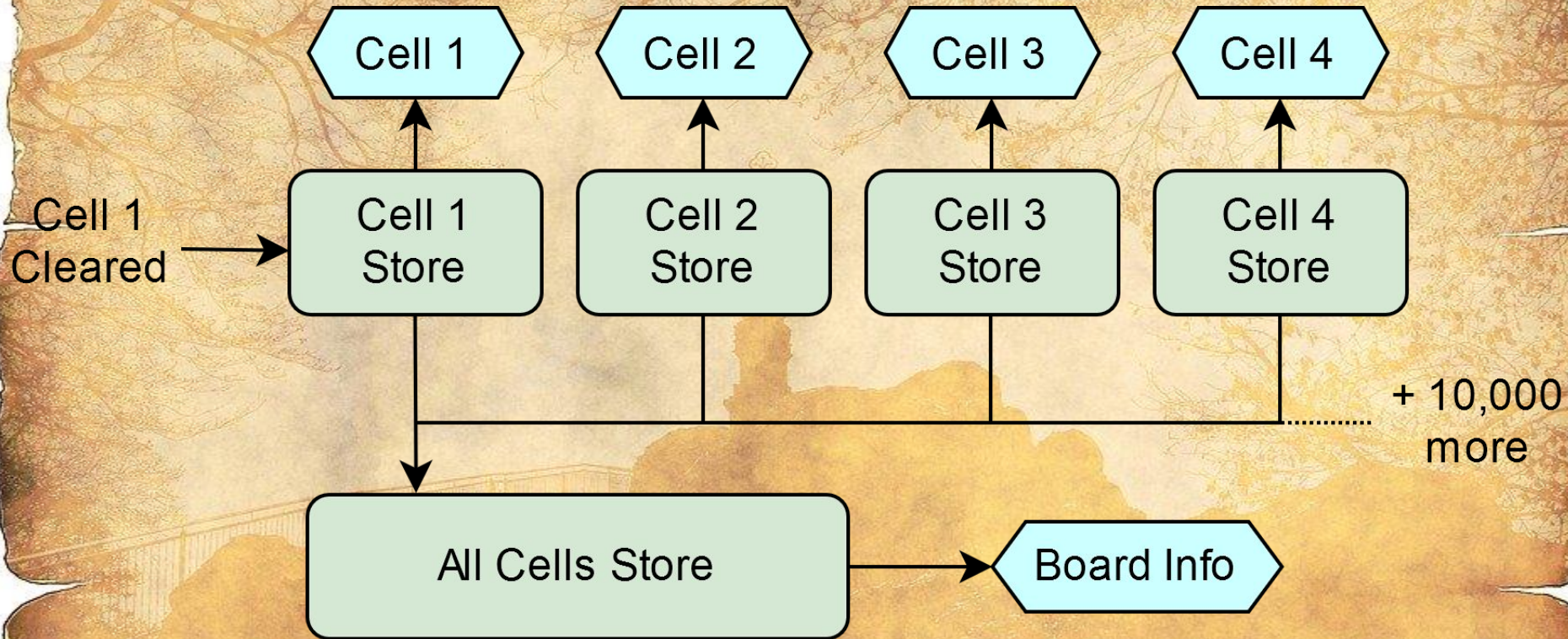
*Deriving
Bottom-Up*

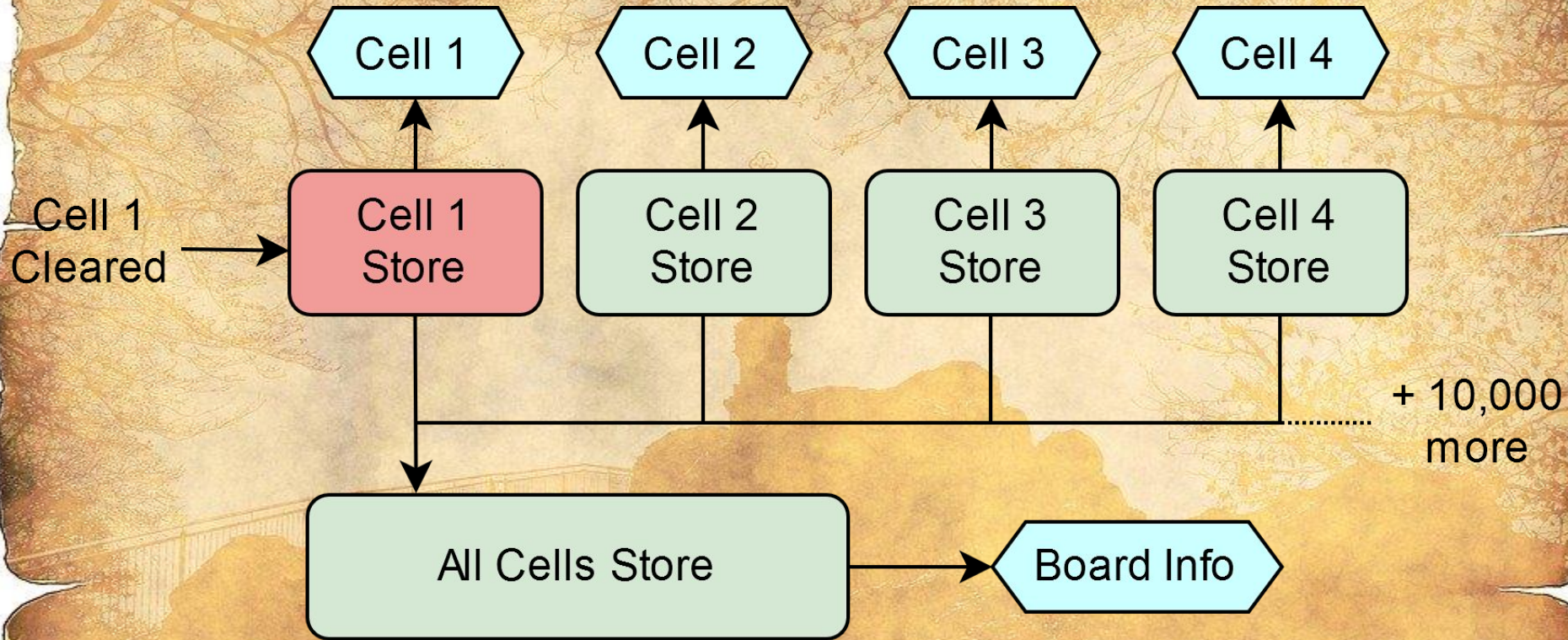


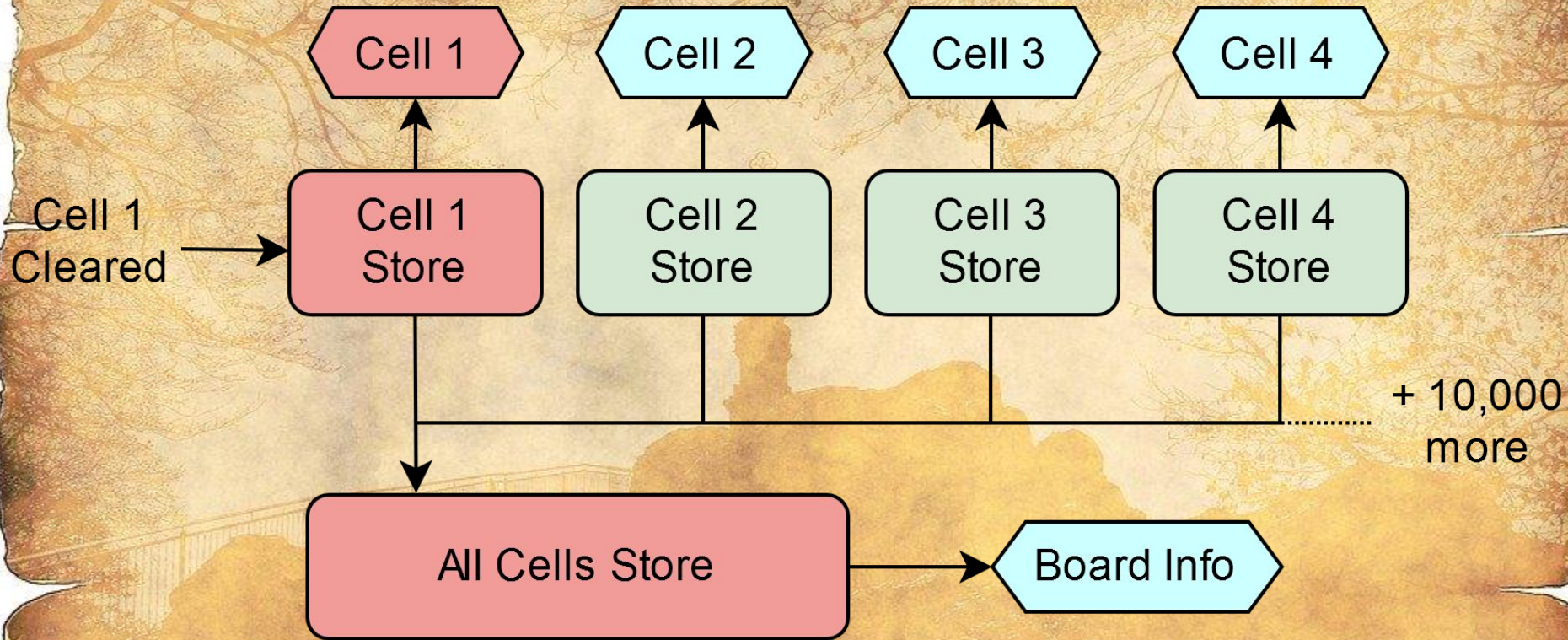


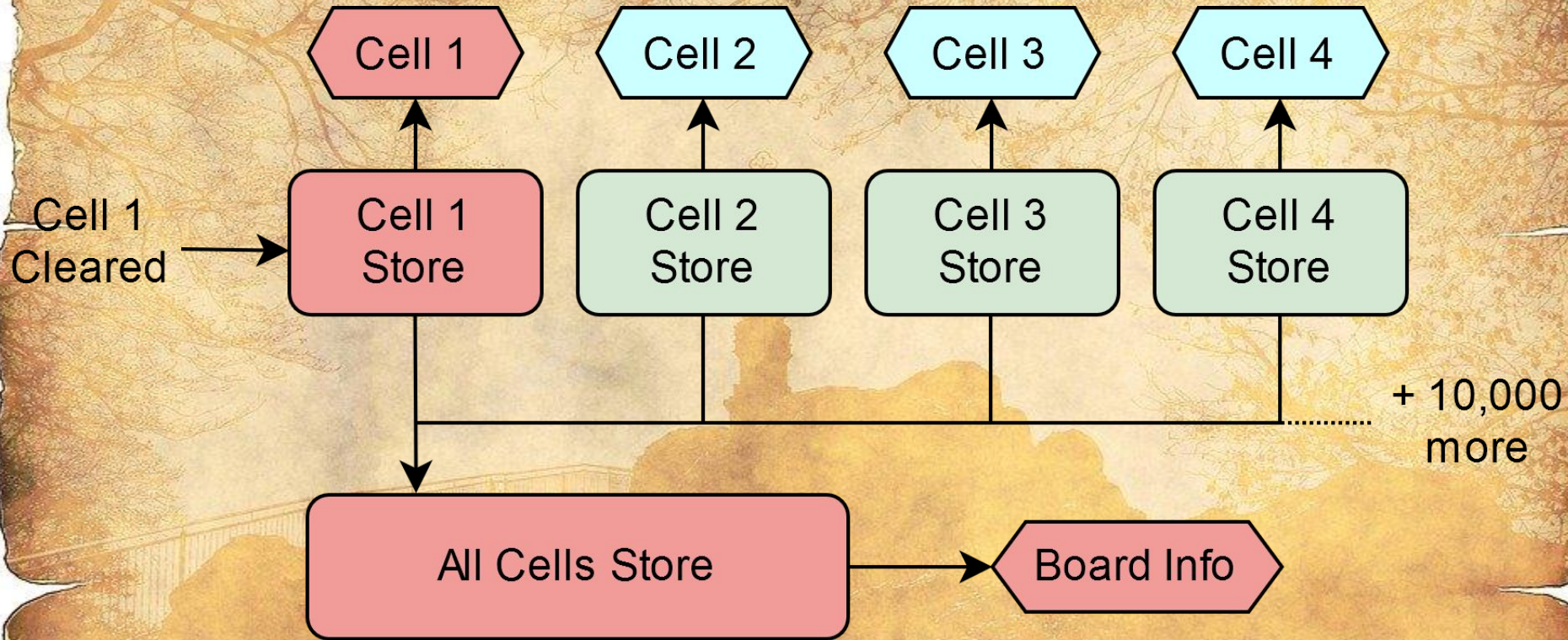


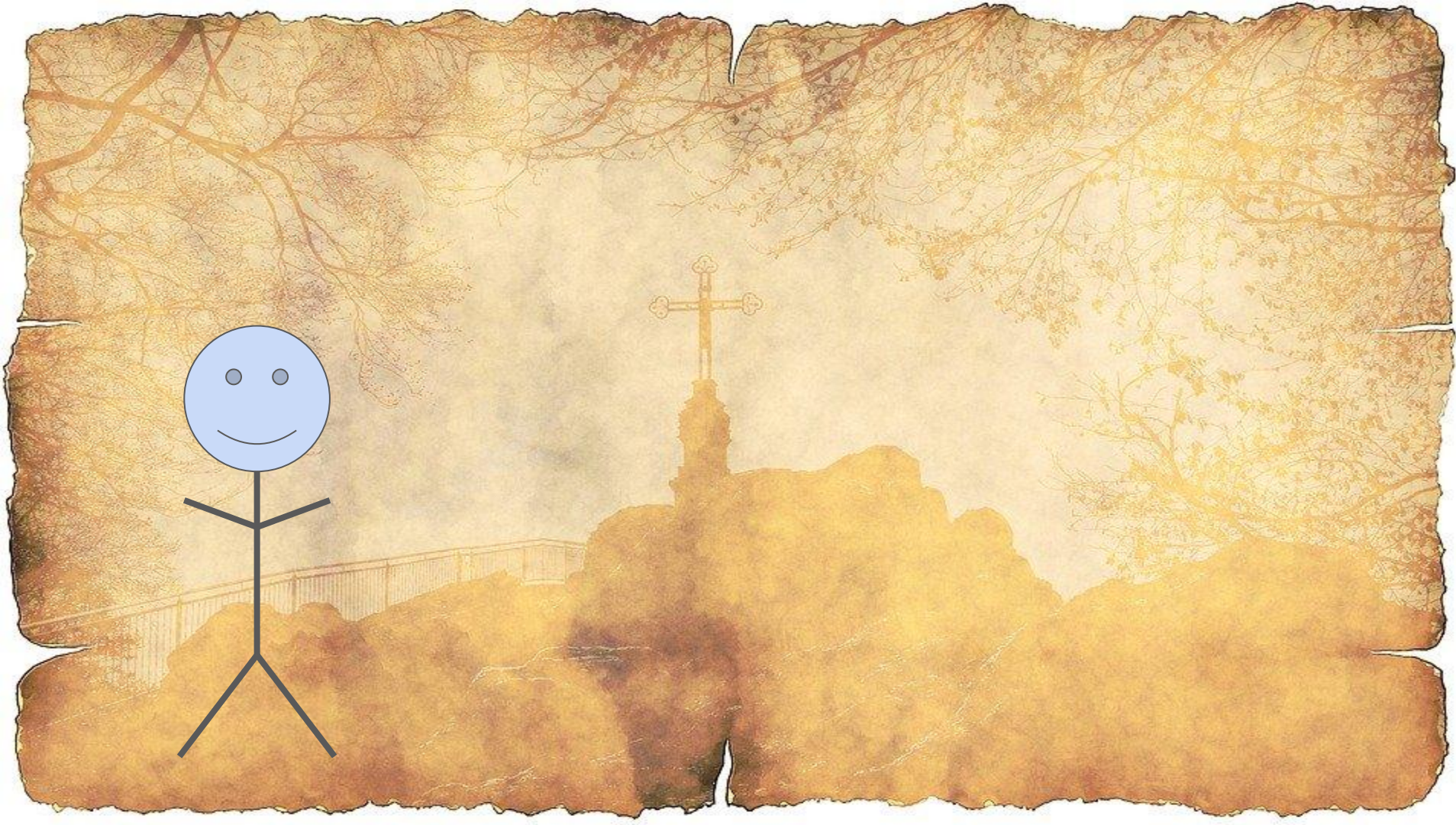




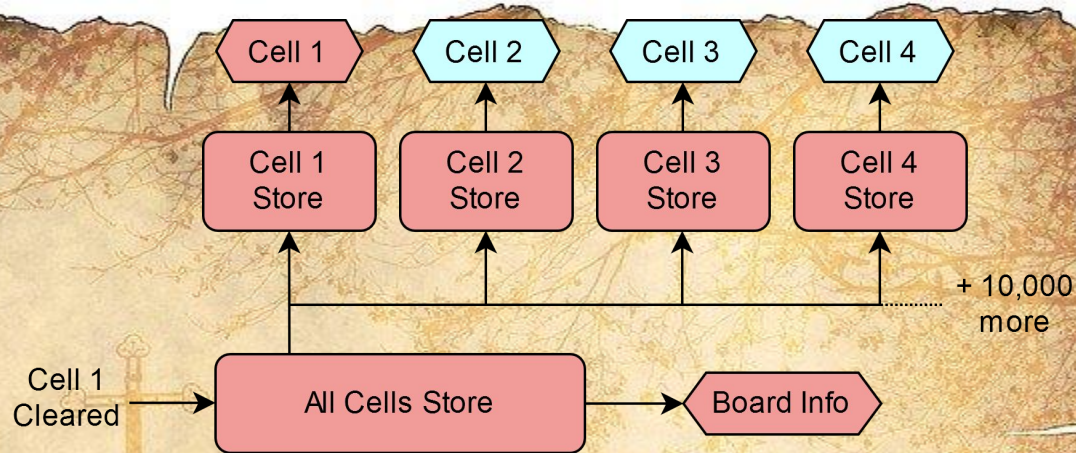




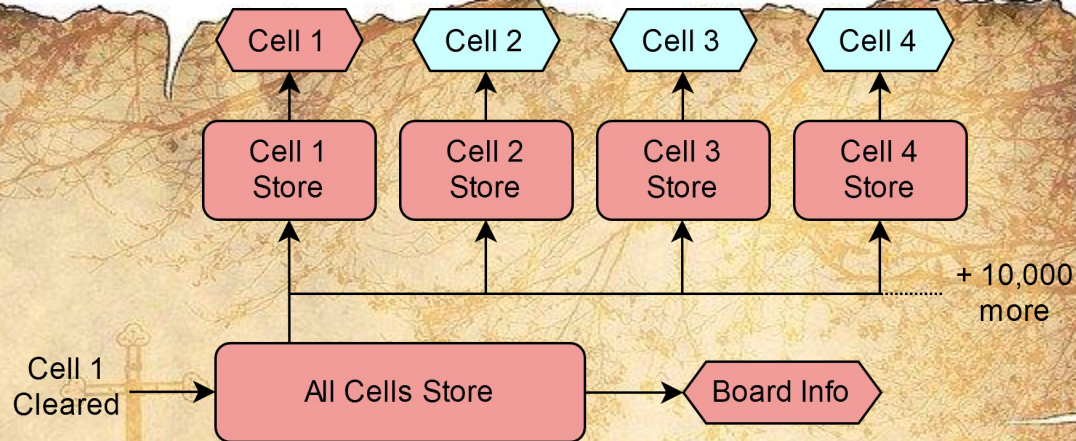




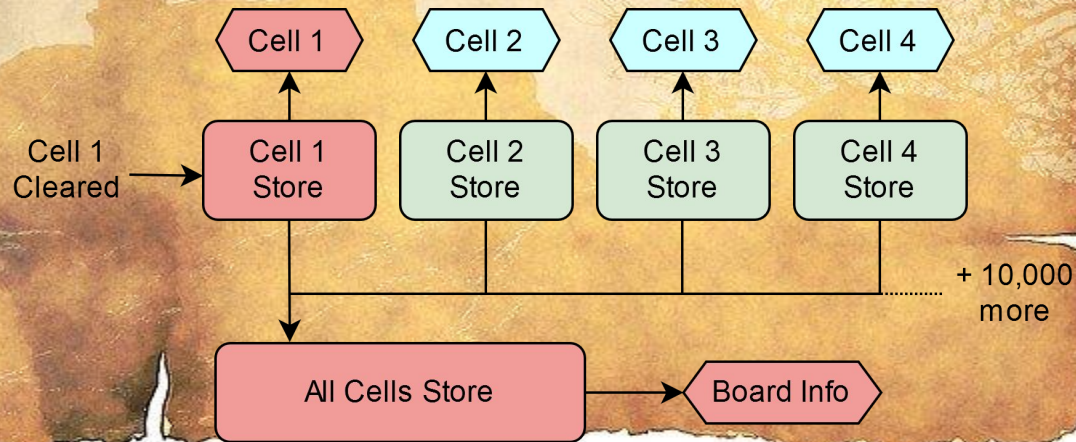
TOP-DOWN



TOP-DOWN



Bottom-Up

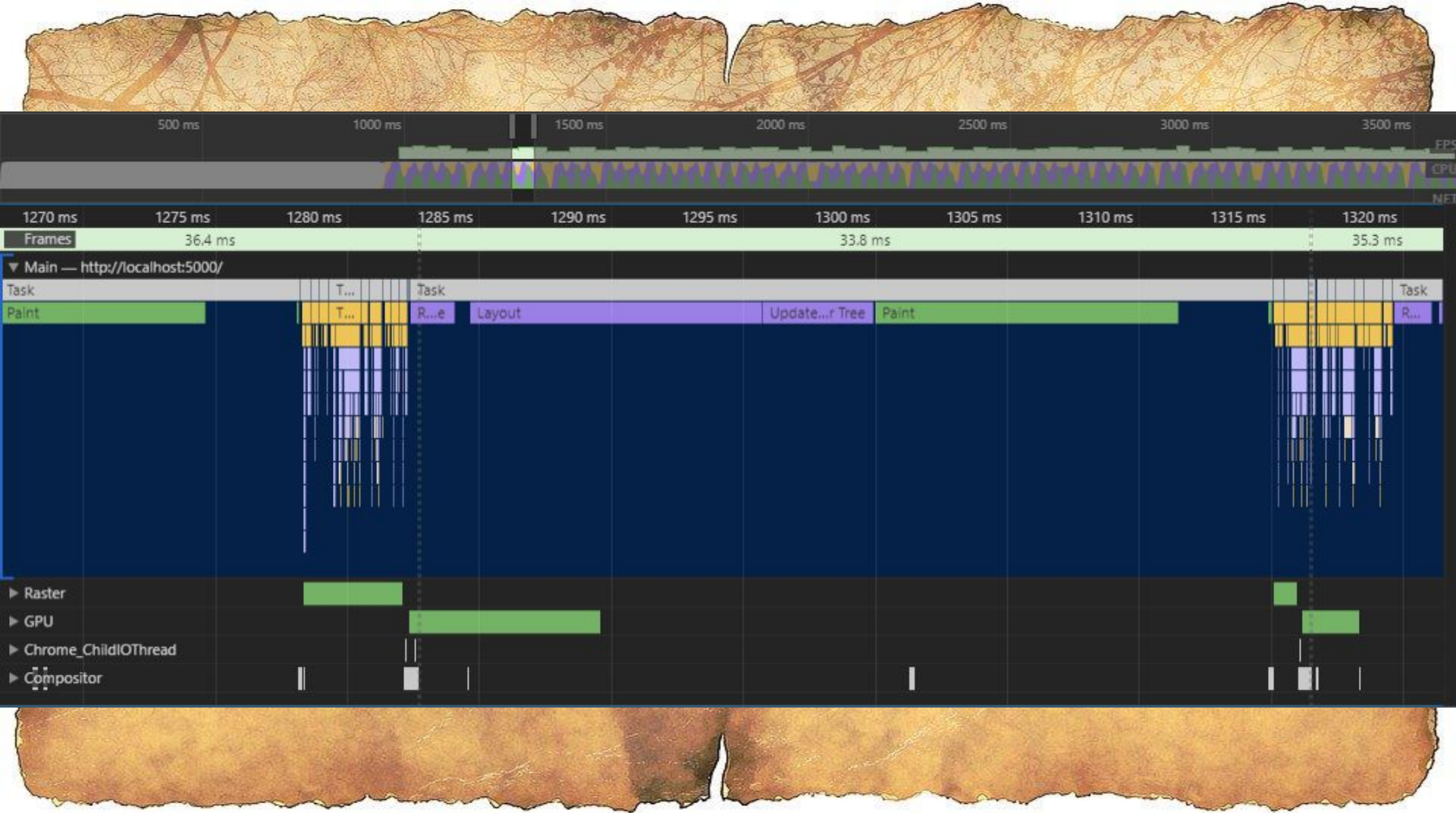


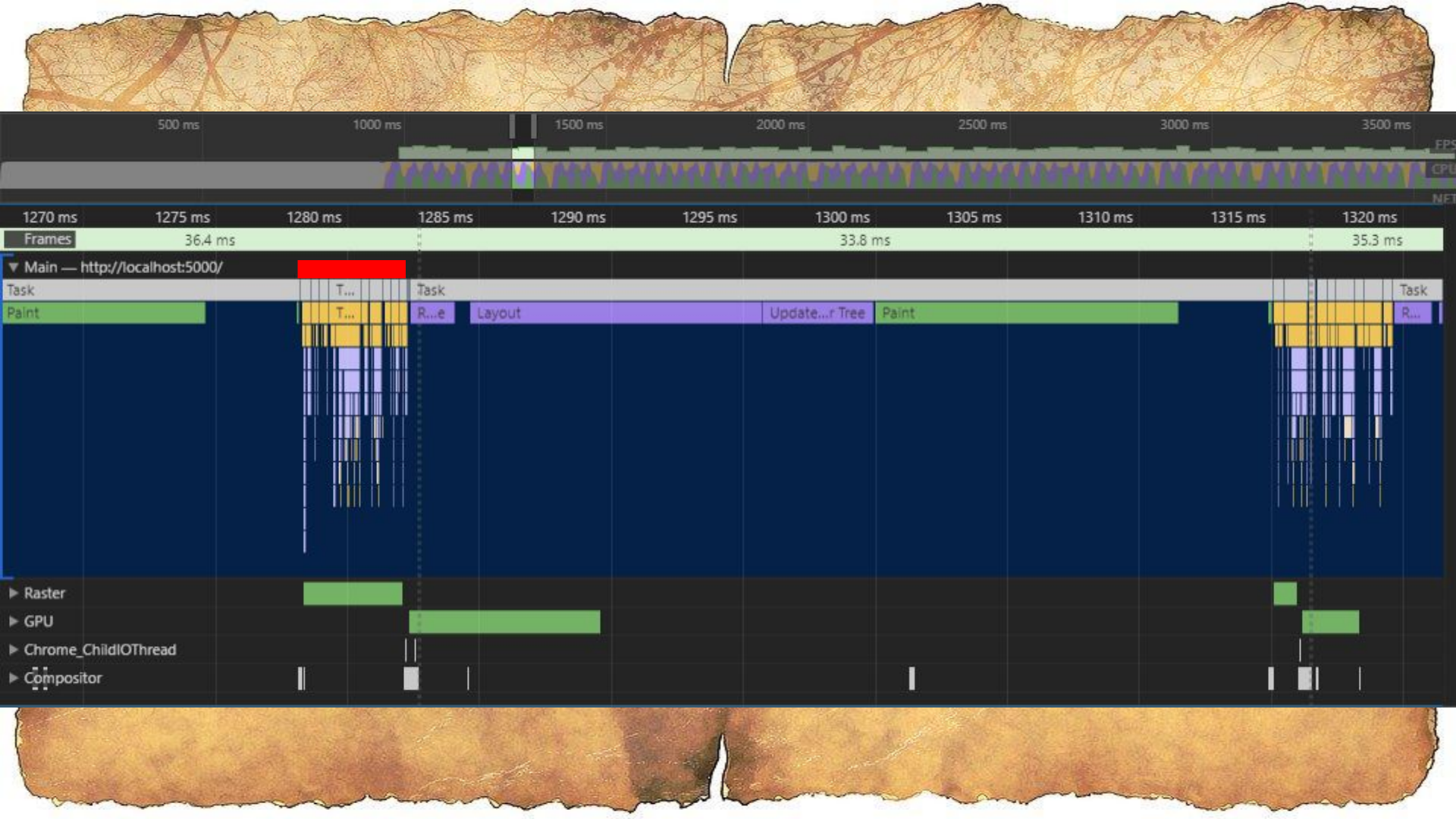
A watercolor illustration of a cemetery scene. In the center, a cross stands on a small hill. To the left, a fence runs along a path. Bare, leafless trees with thin branches frame the top and sides of the scene. The overall color palette is warm, featuring shades of yellow, orange, and brown, with a textured, aged paper appearance.

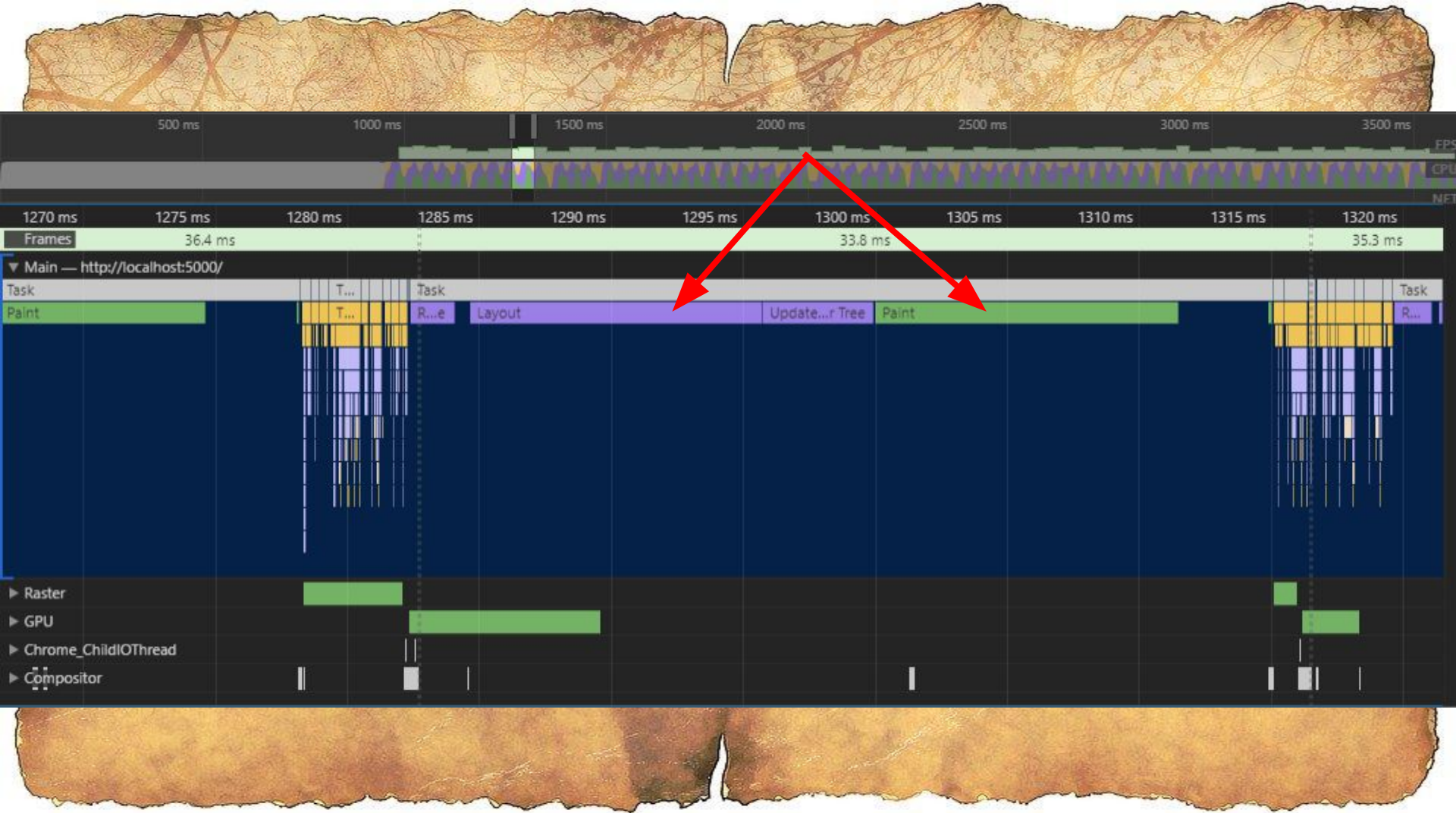
Results

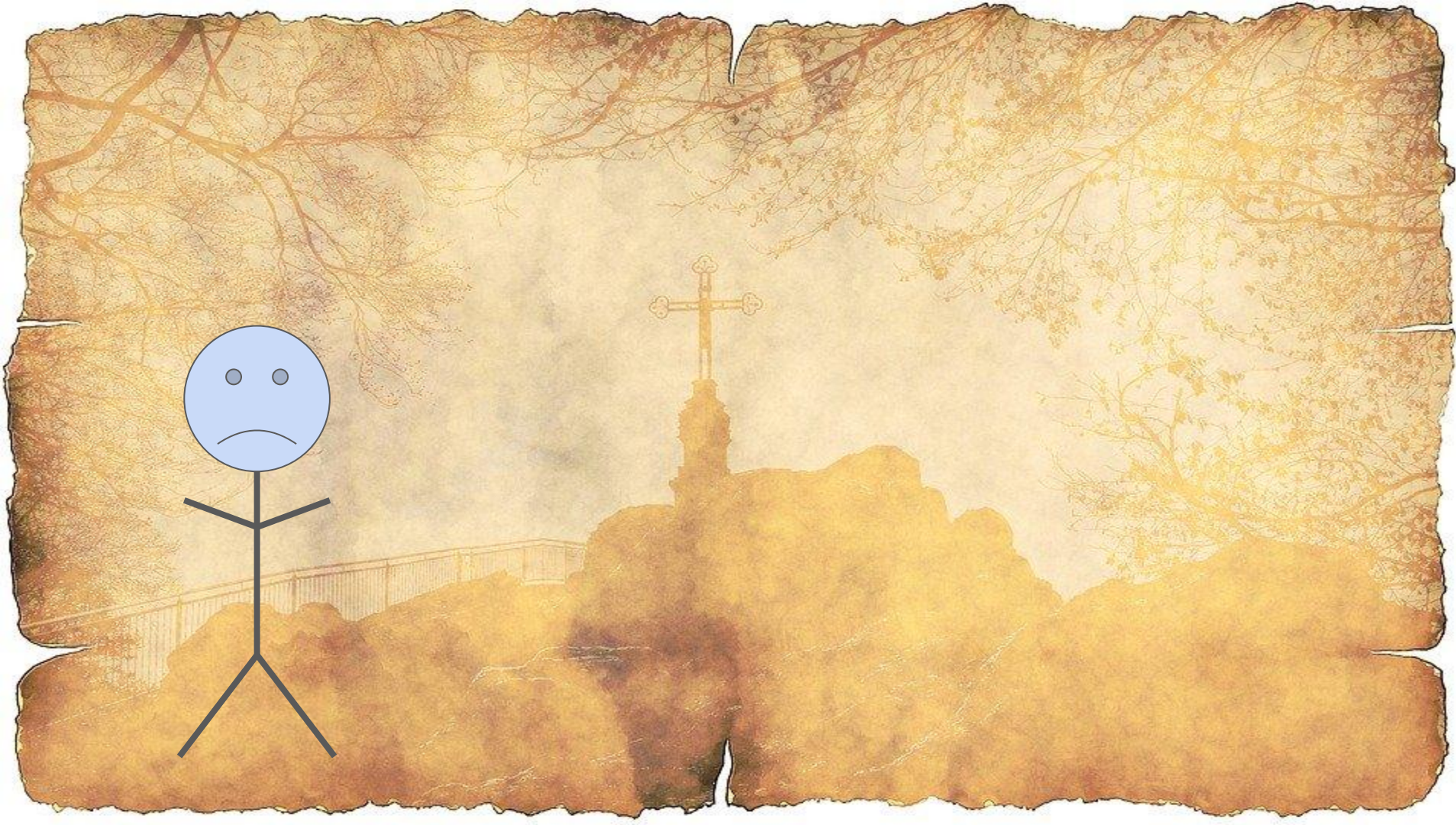
A watercolor illustration of a landscape. In the center, a cross stands on a hill. To the left, there are trees and a fence. The foreground is filled with large, textured, yellowish-brown shapes. The background is a mix of light and dark yellow and orange tones, suggesting a sunset or sunrise. The text '23.3 fps!' is written in a large, black, handwritten font across the middle of the image.

23.3 fps!

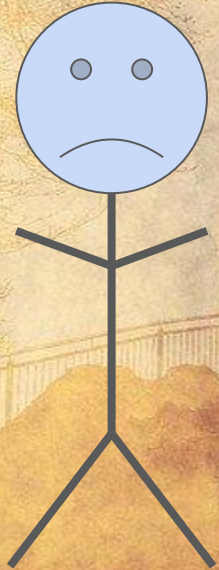




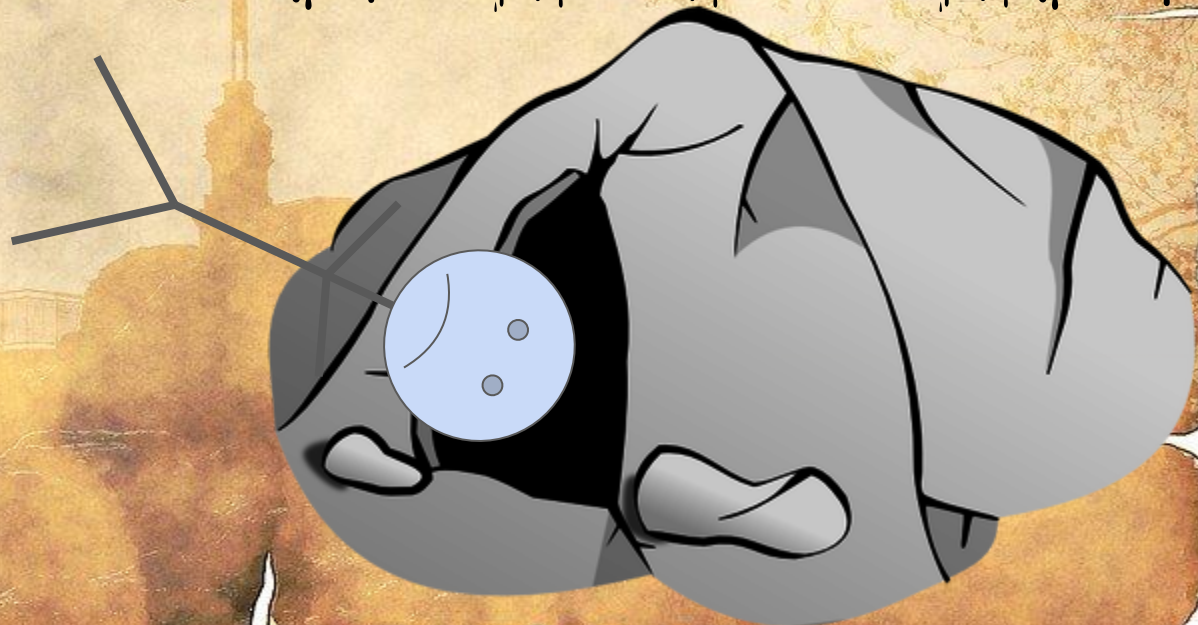


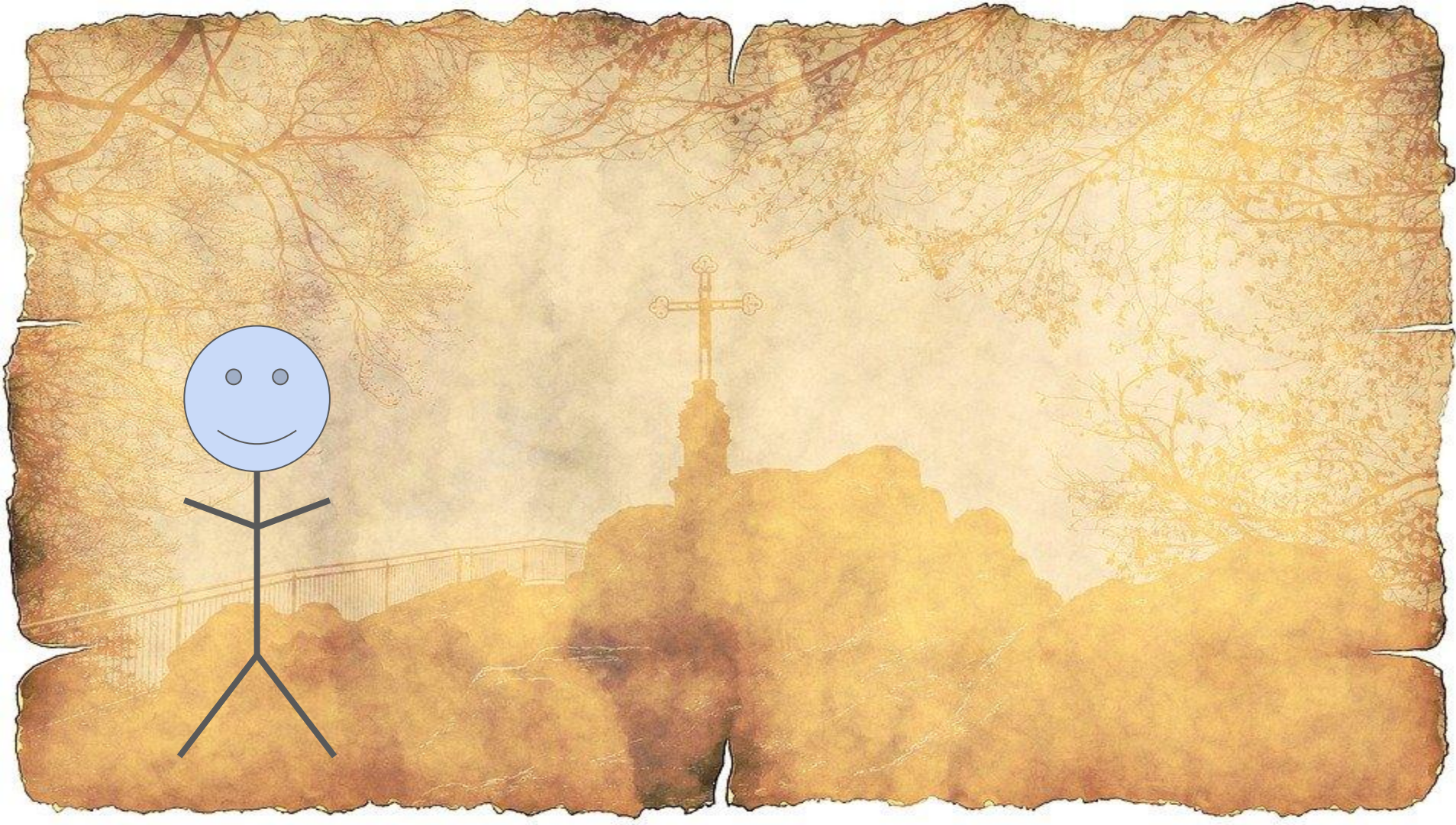


CAVE OF HTML RENDERING OPTIMISATION

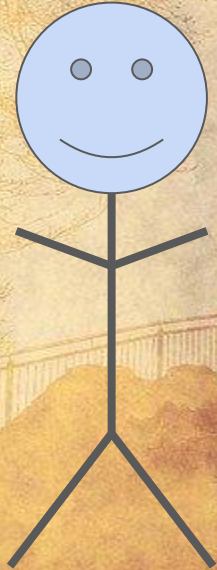


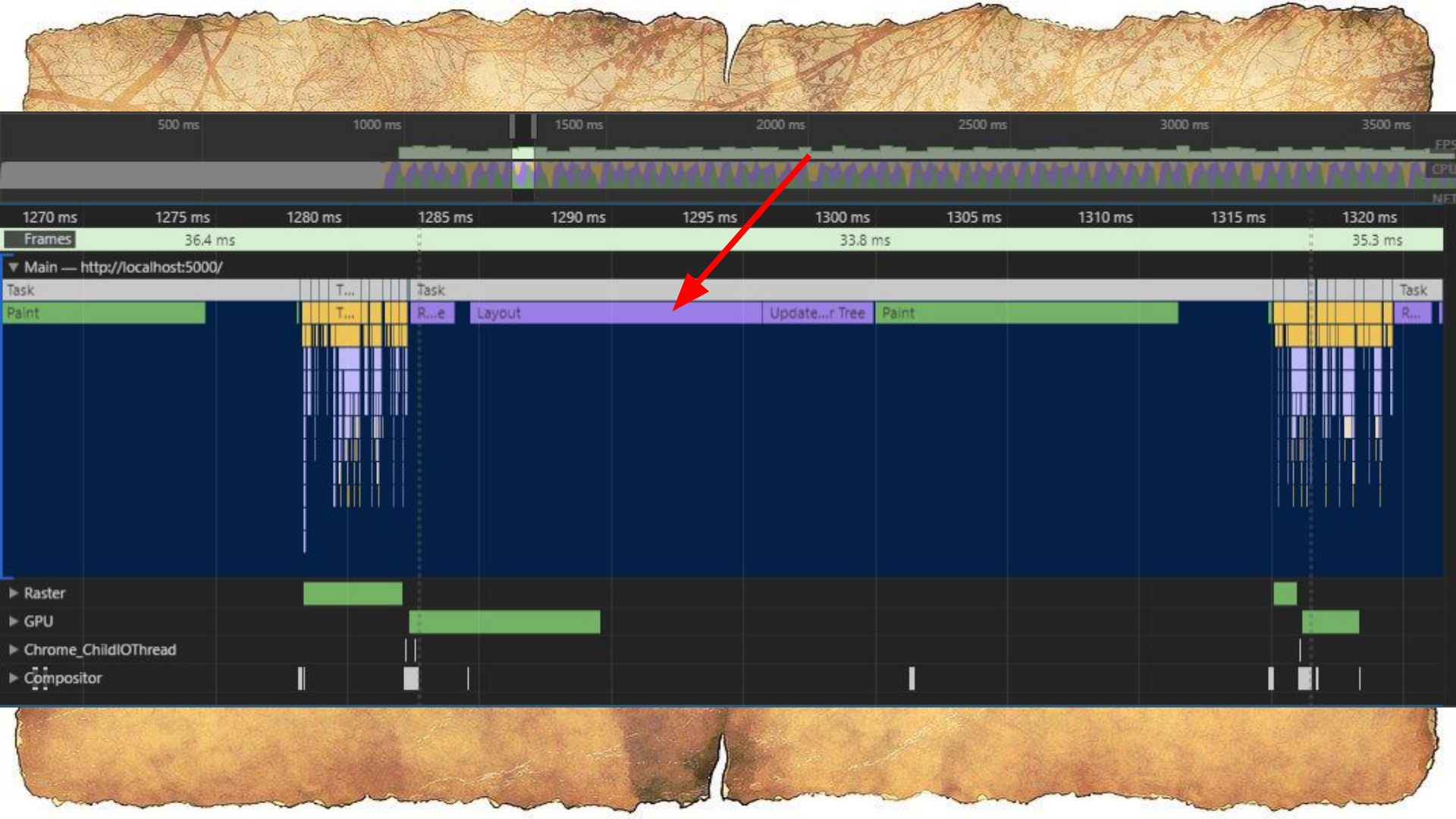
CAVE OF HTML RENDERING OPTIMISATION

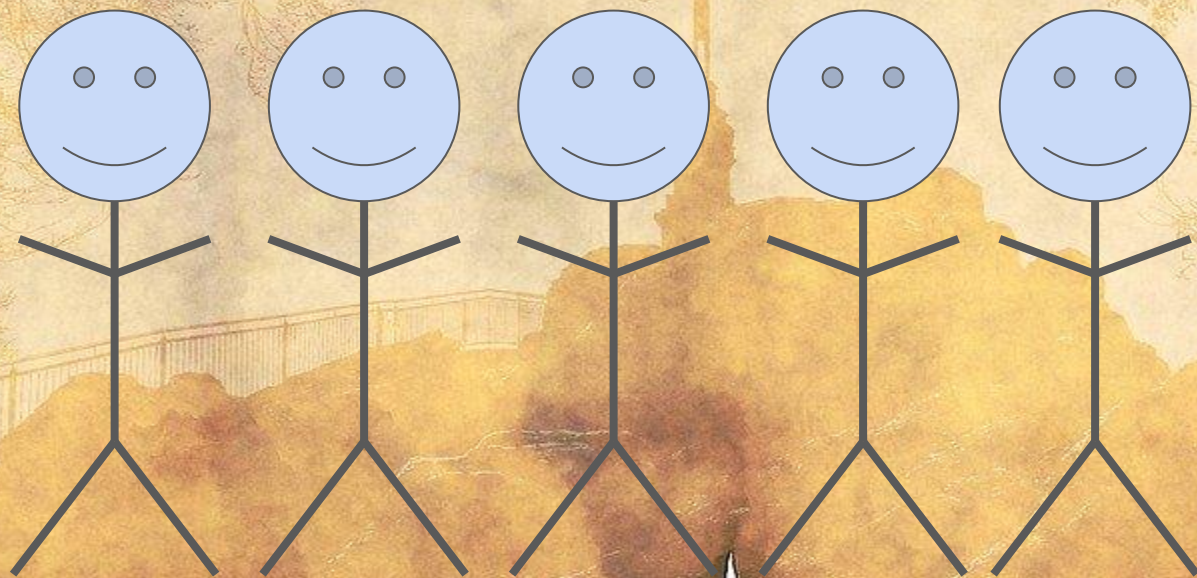


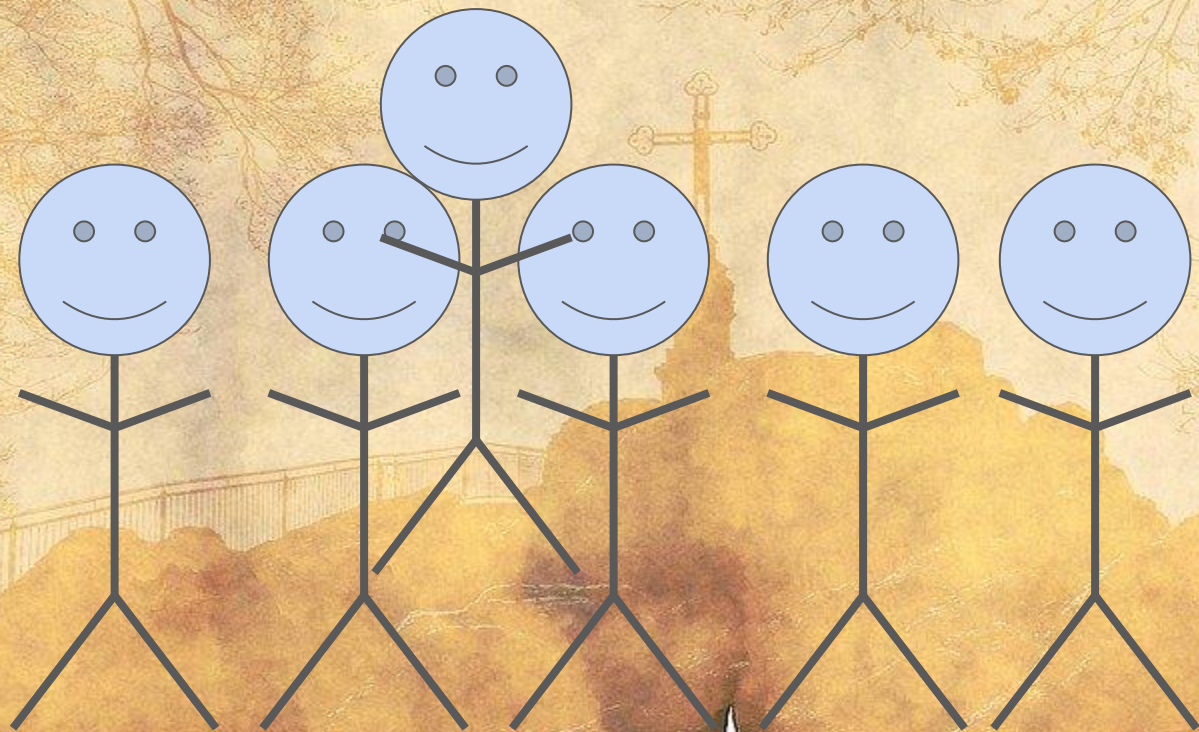


UNNECESSARY HTML LAYOUT









Clear

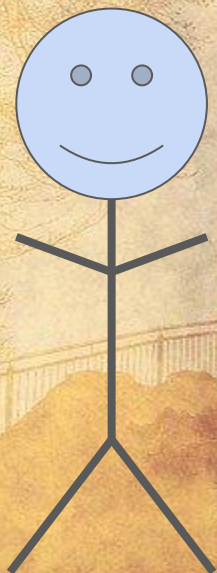
1



Flag

X

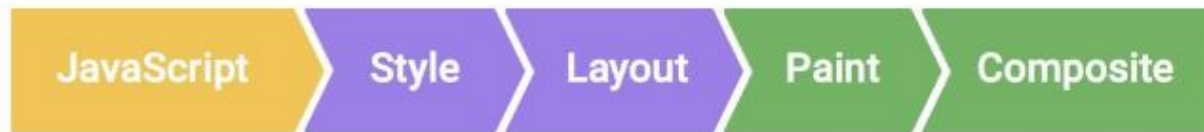




Triggering Layout And Paint

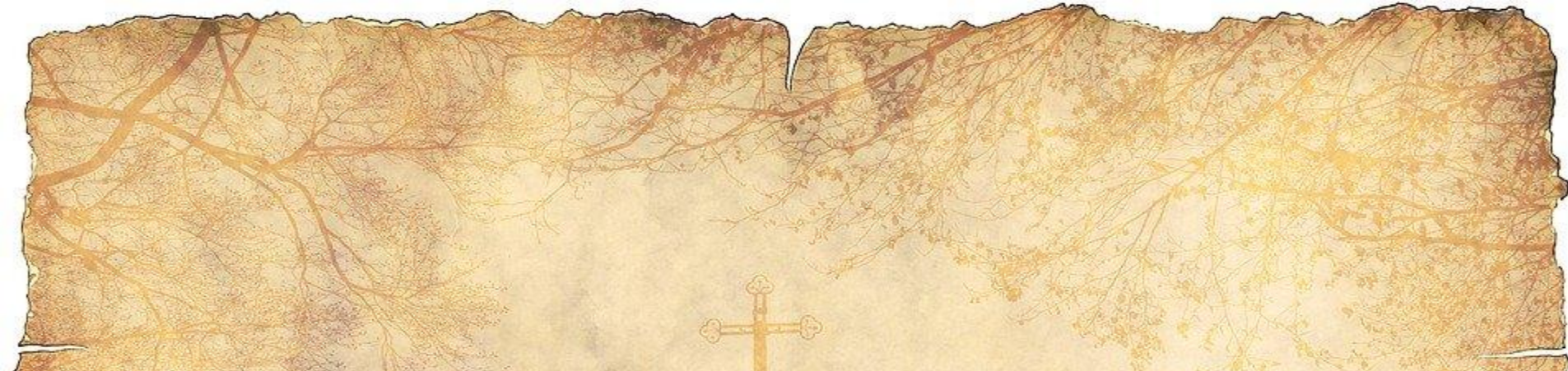


If you trigger layout, you will *always trigger paint*, since changing the geometry of any element means its pixels need fixing!



You can also trigger paint if you change non-geometric properties, like backgrounds, text color, or shadows. In those cases layout won't be needed and the pipeline will look like this:



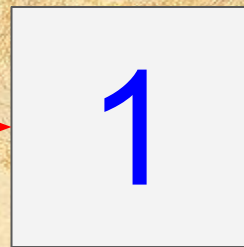


You can also trigger paint if you change non-geometric properties, like backgrounds, text color, or shadows. In those cases layout won't be needed and the pipeline will look like this:

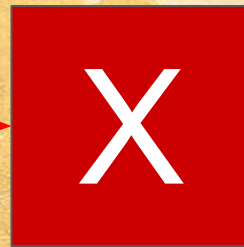
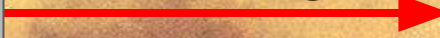




Clear

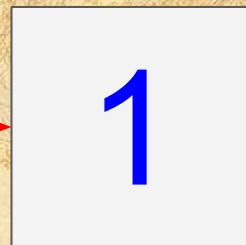


Flag

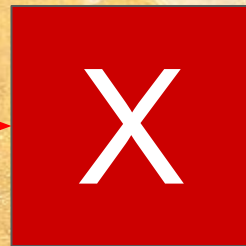




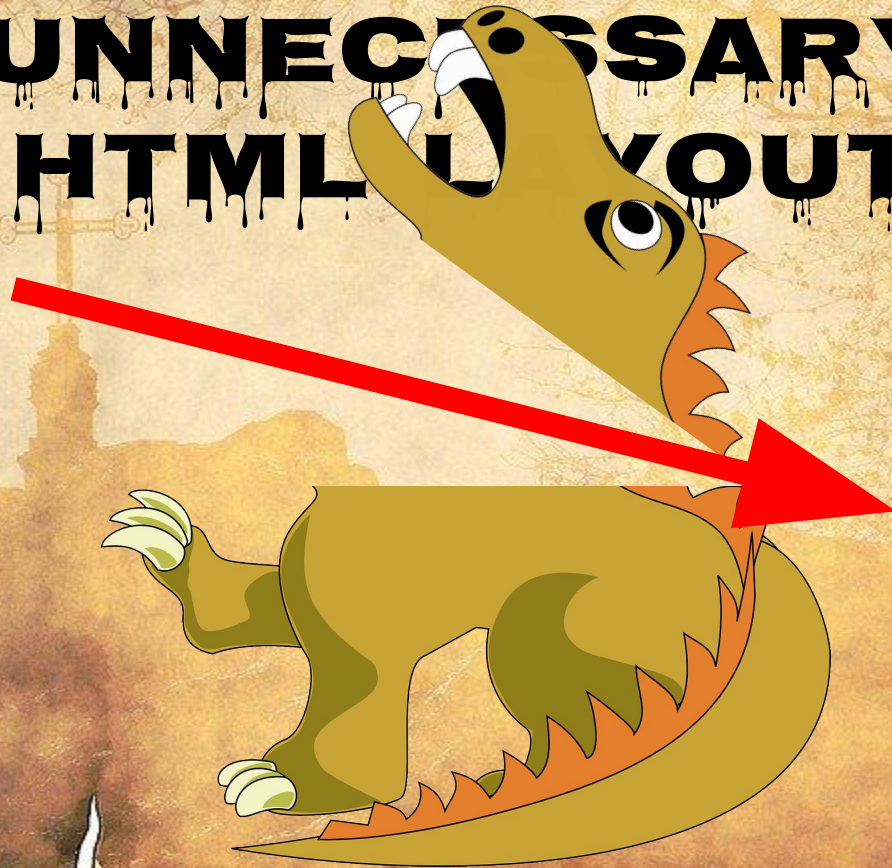
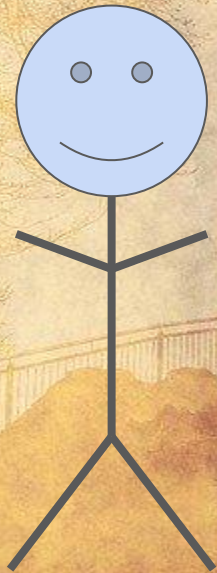
Clear



Flag



**UNNECESSARY
HTML LAYOUT**

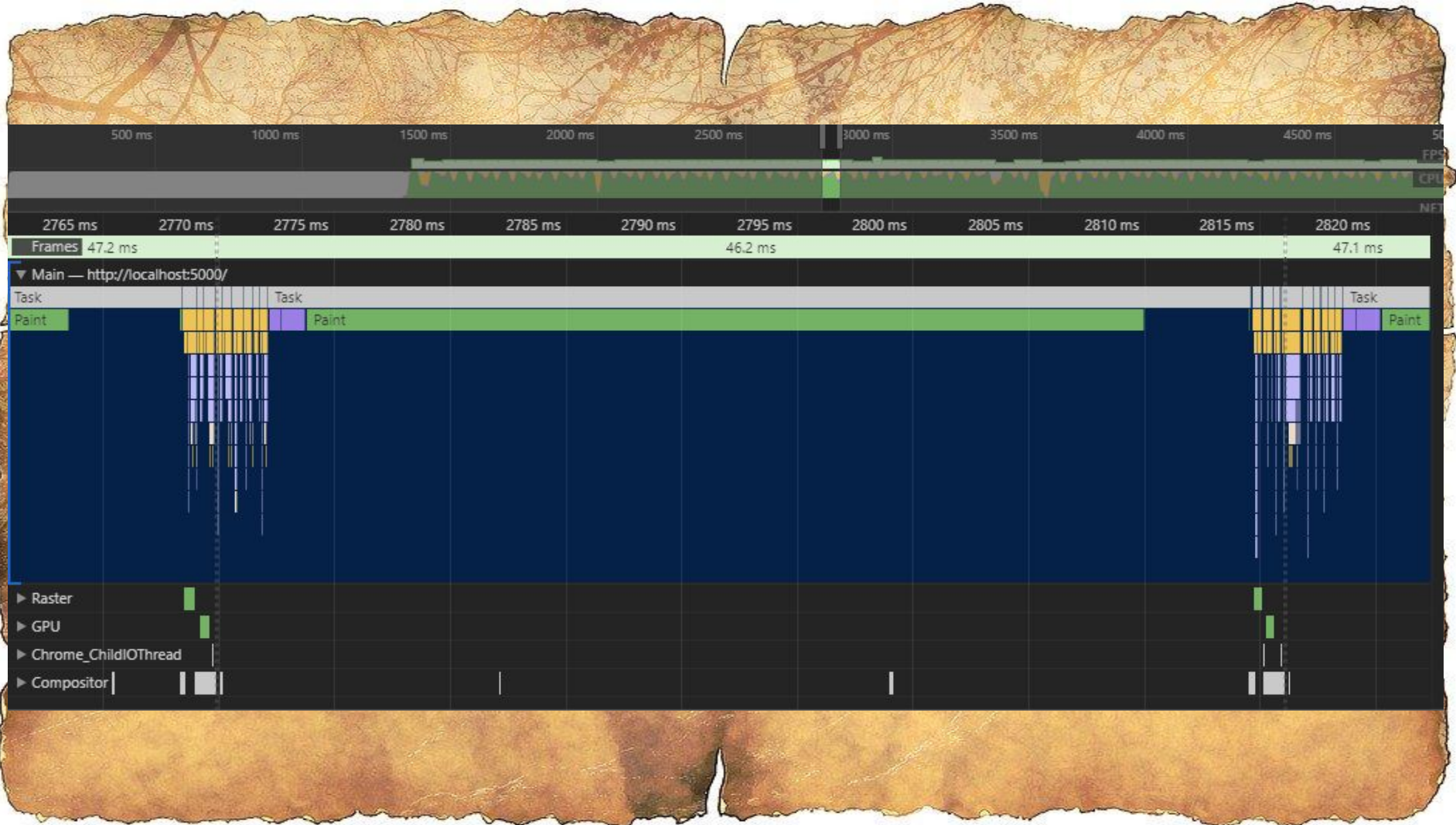


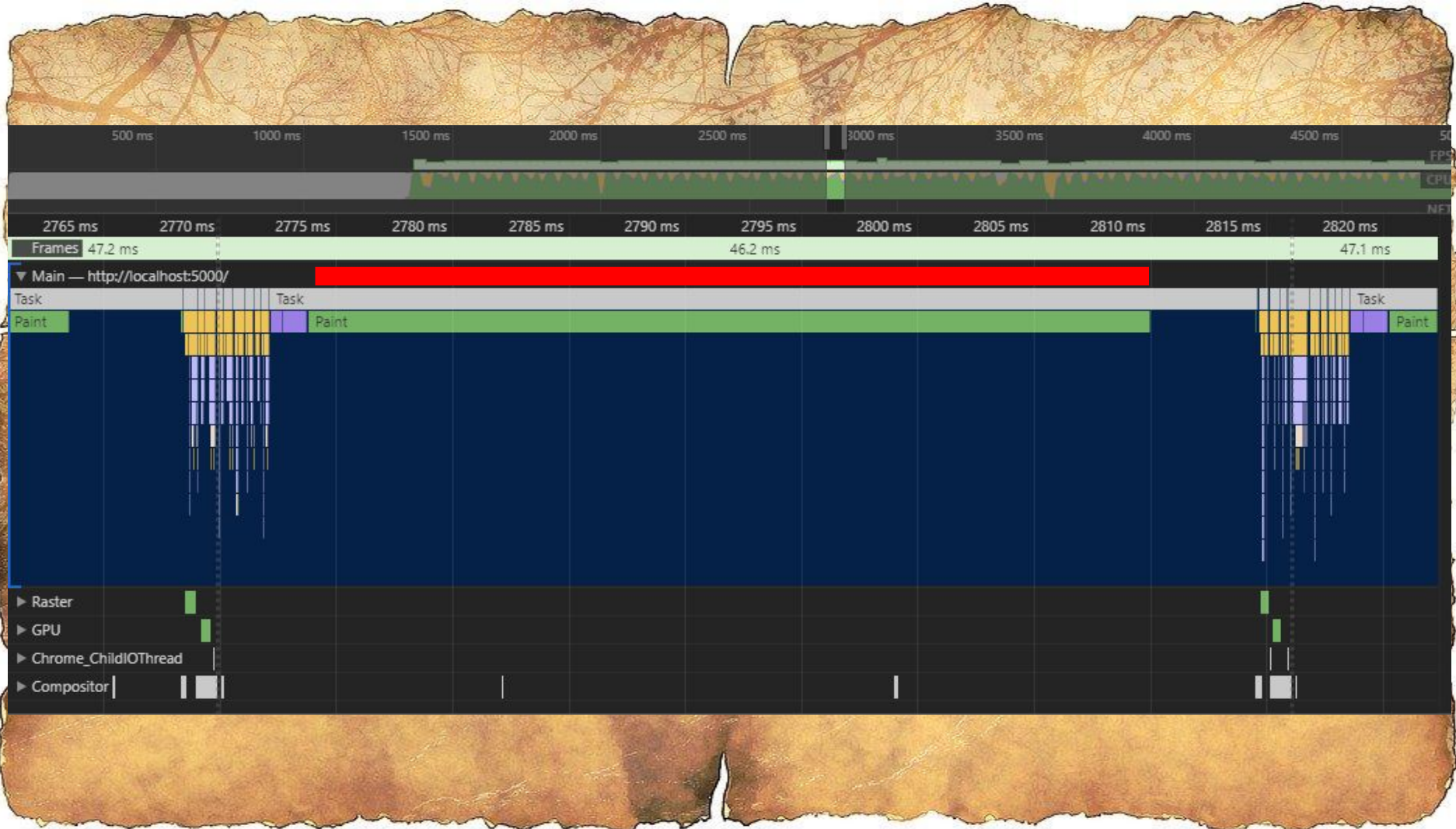
A watercolor illustration of a cemetery scene. In the center, a cross stands on a small hill. To the left, a fence runs along a path. Bare, leafless trees with intricate branch structures frame the top and sides of the scene. The bottom of the image is filled with large, textured brushstrokes in shades of yellow and brown, suggesting grass or foliage. The word "Results" is written in a black, cursive script across the middle of the image.

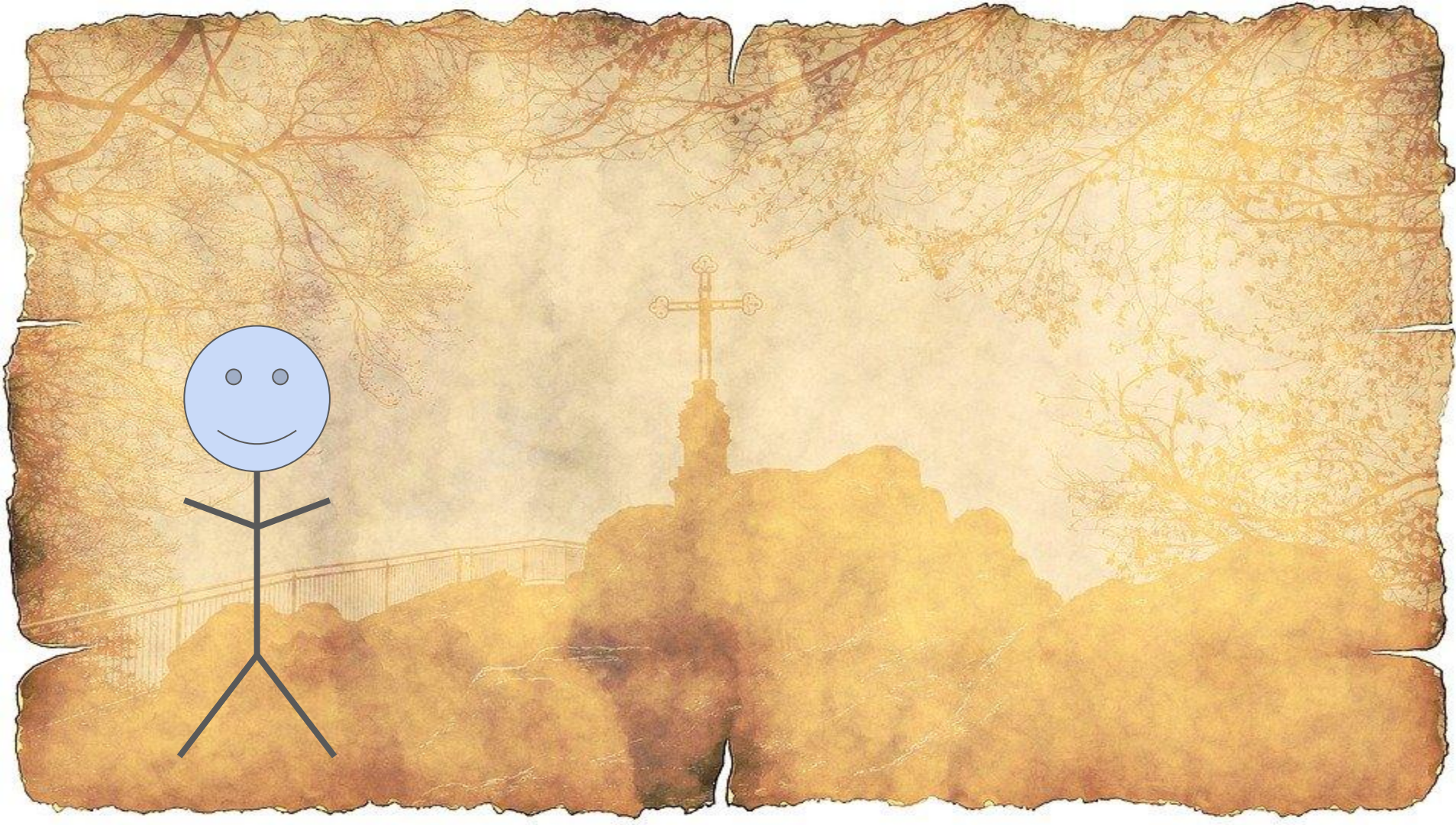
Results

A watercolor illustration of a landscape. In the center, a cross stands on a hill. The foreground is filled with large, textured, golden-brown shapes that look like bushes or clouds. The background is a pale, hazy sky with faint, wispy clouds. The entire scene is framed by a torn, aged paper border with a warm, yellowish-brown color palette. The text "36.5 fps!" is written in a black, cursive font across the middle of the image.

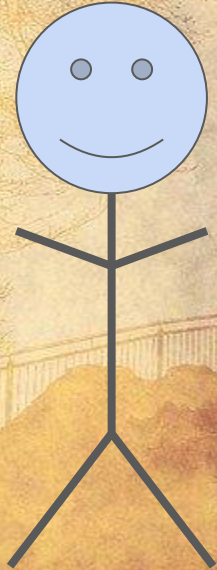
36.5 fps!



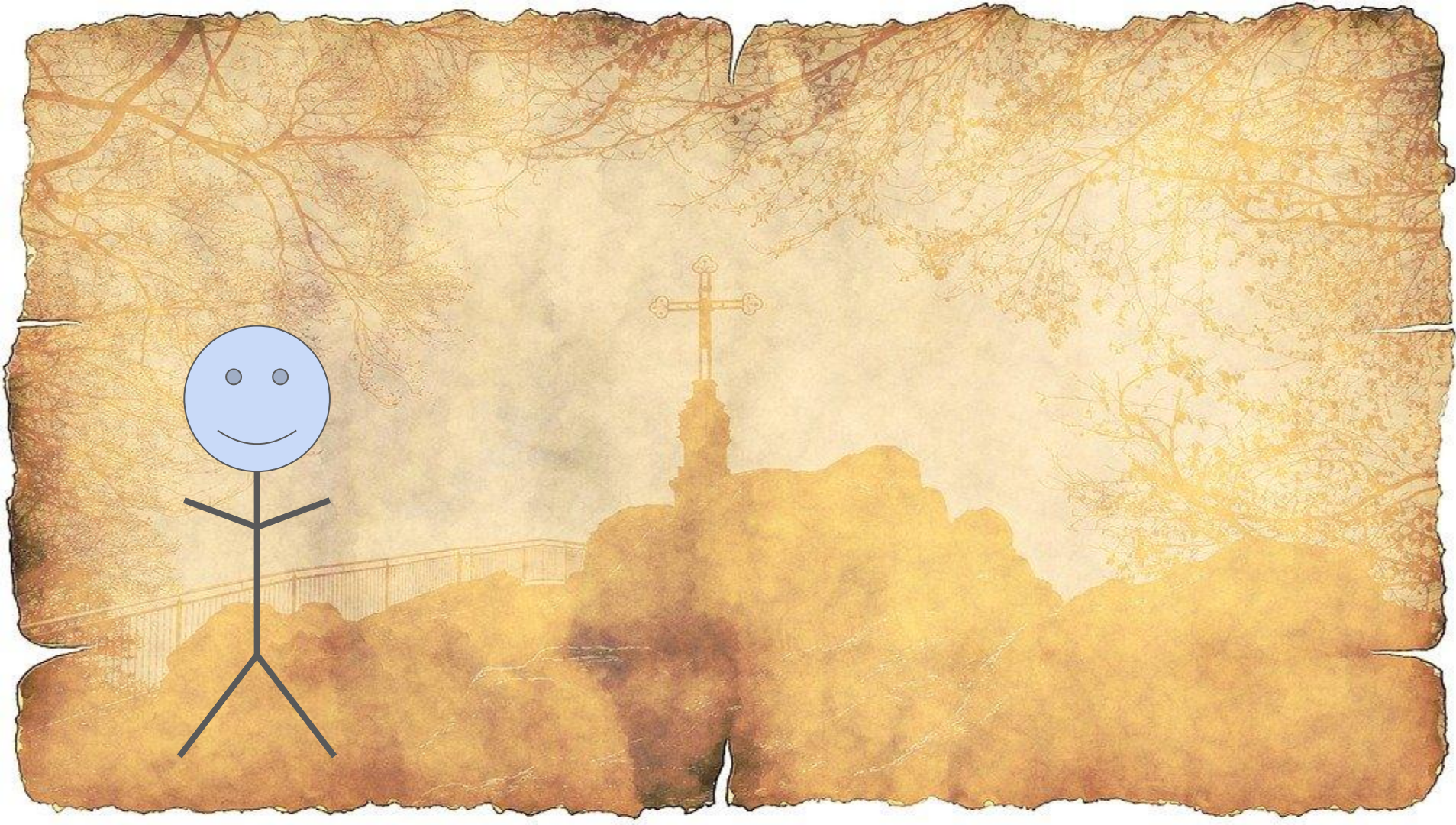




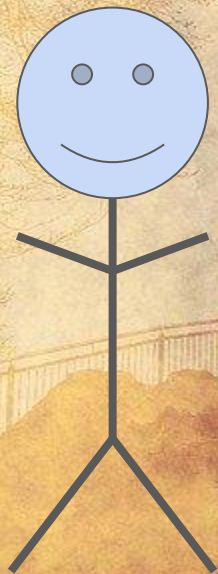
UNNECESSARY PAINT COMPLEXITY





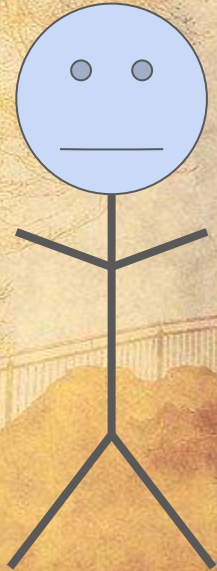


800 * 800 PX



800 * 800 PX

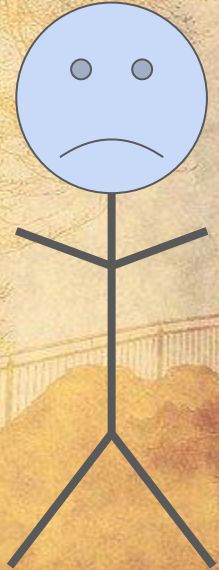
60X PER SEC



800 * 800 PX

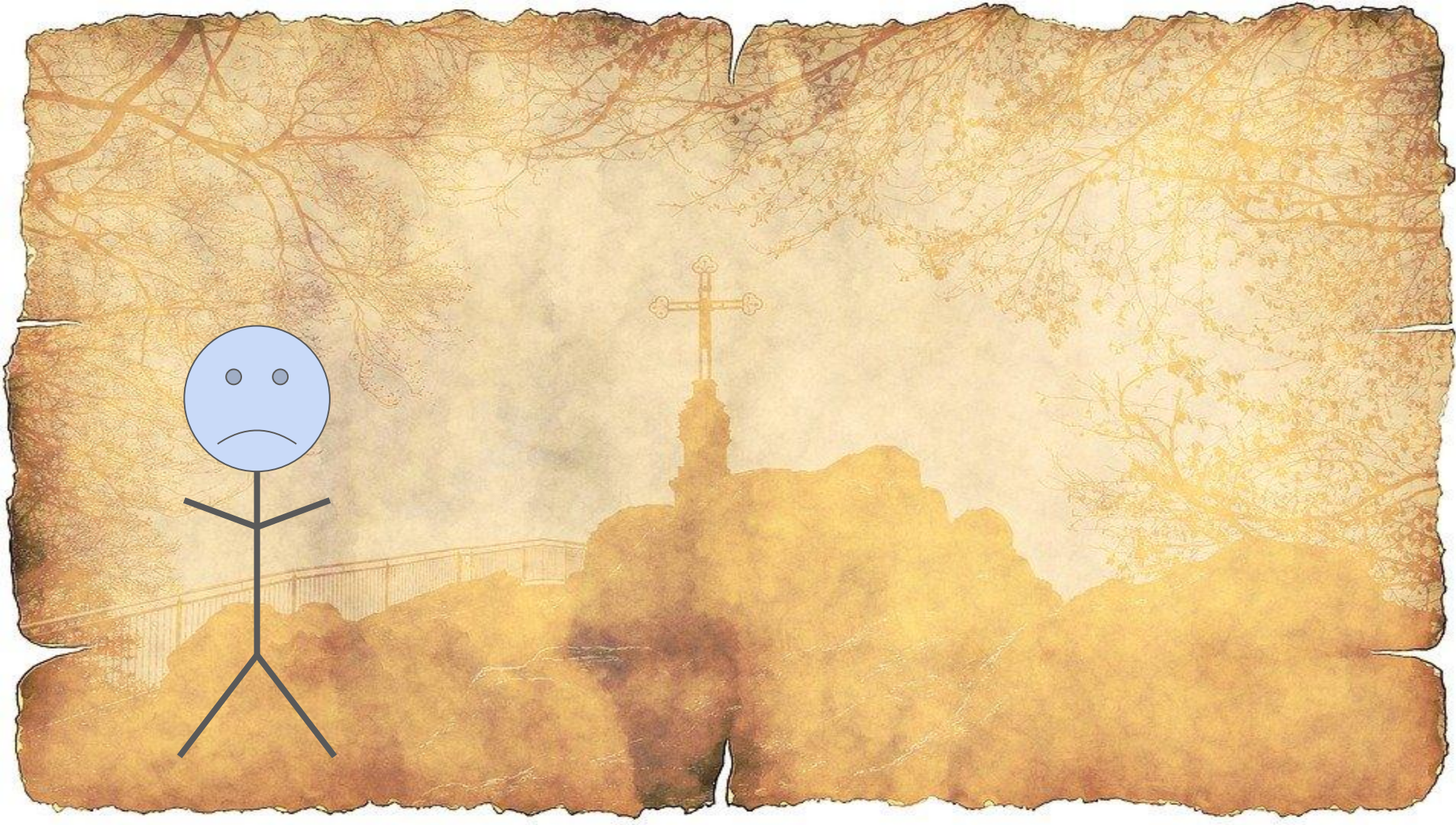
60X PER SEC

30,000 STEPS

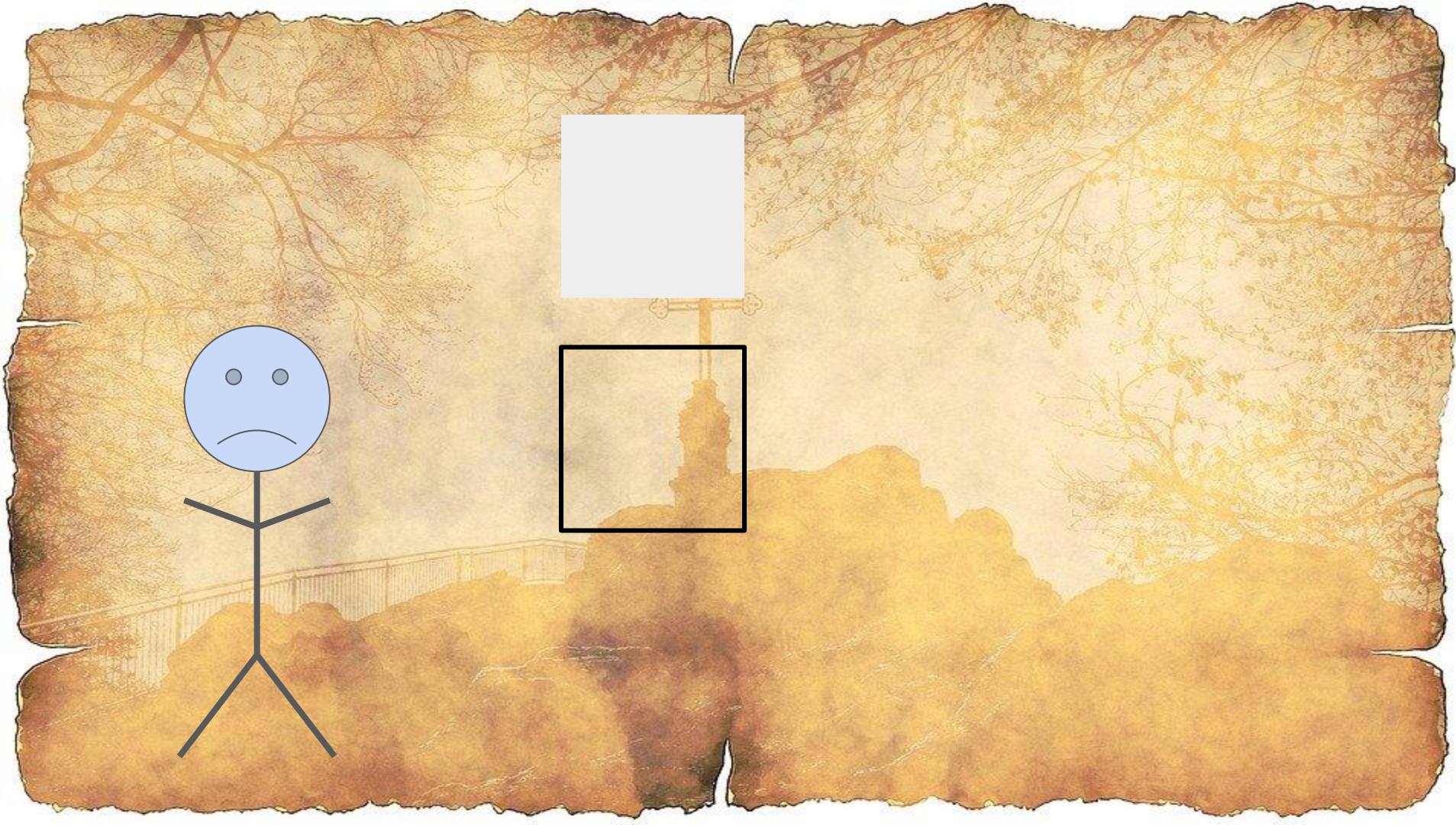


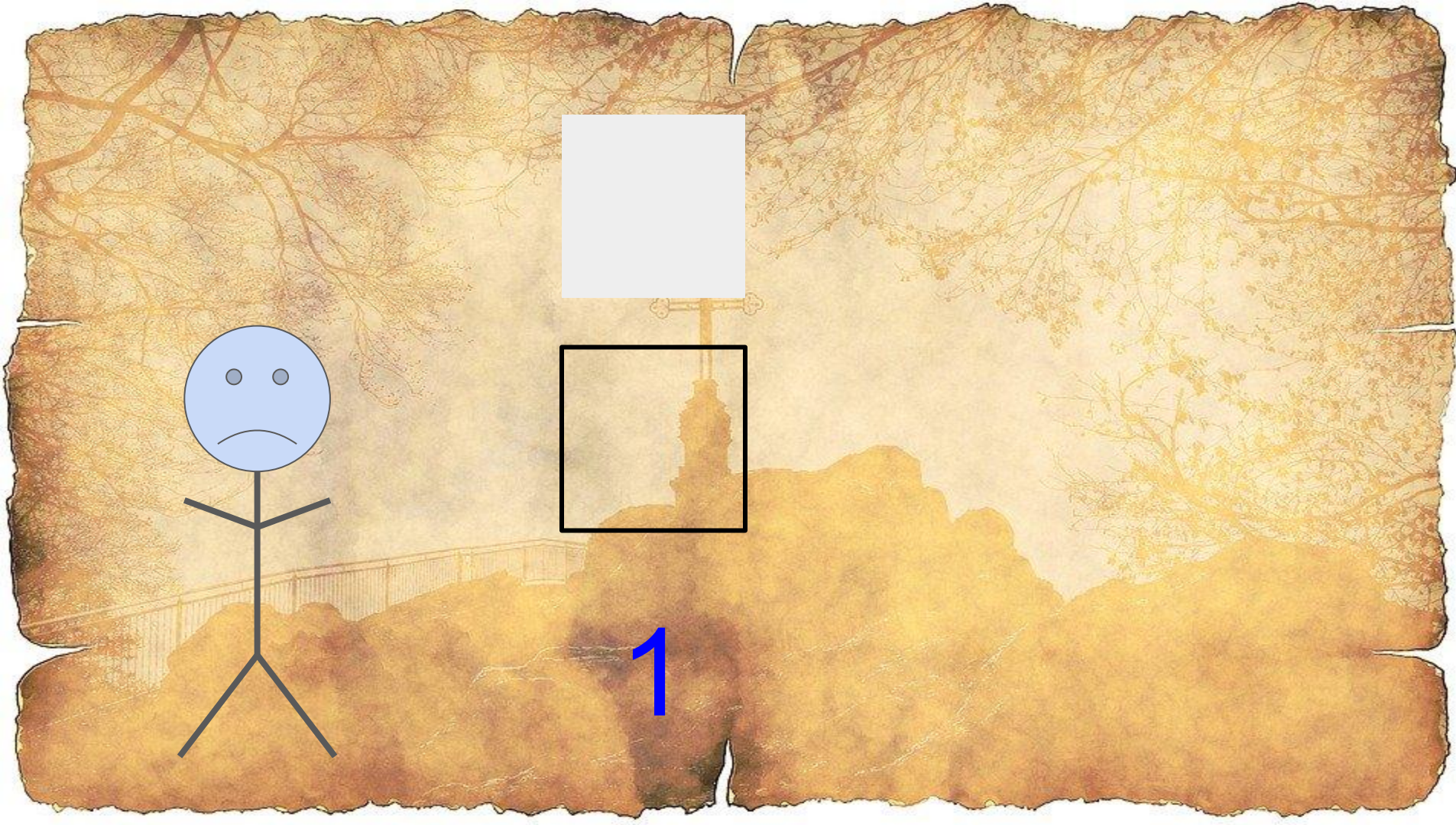


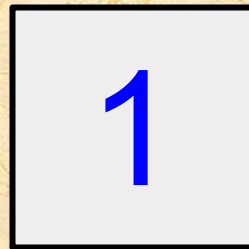
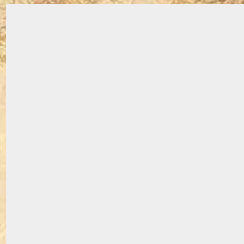
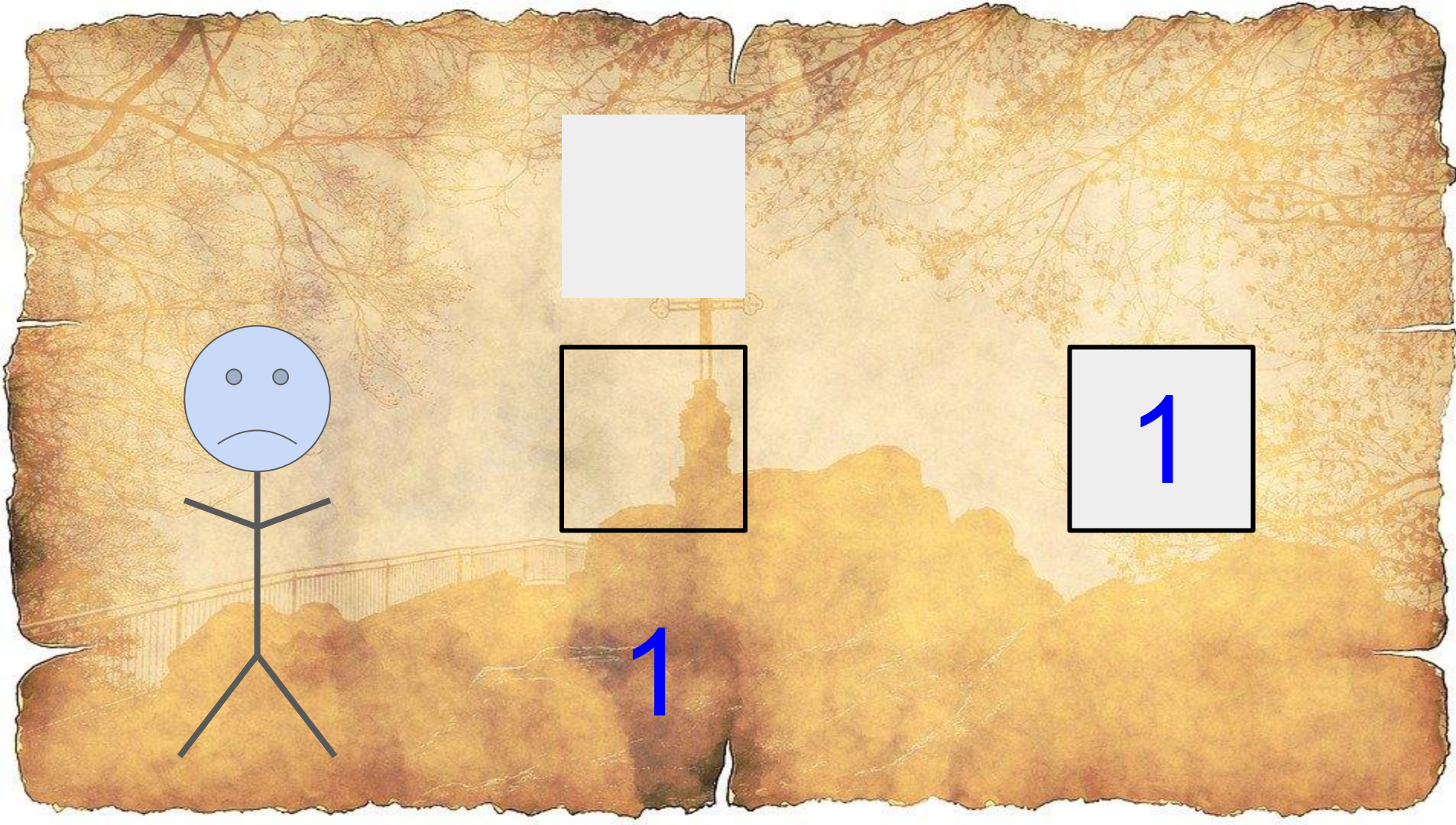
1. Do art
2. ...
3. profit!



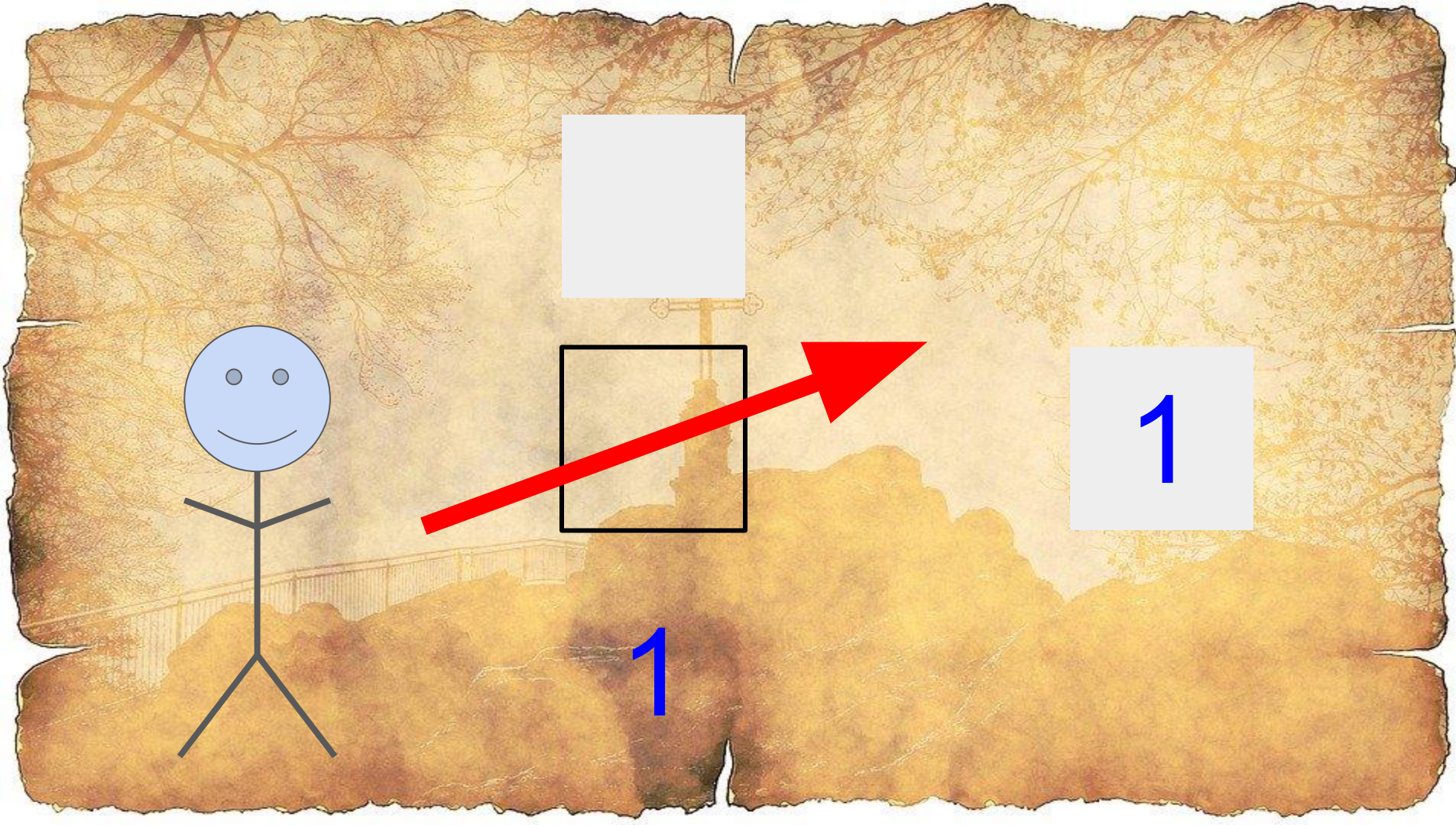




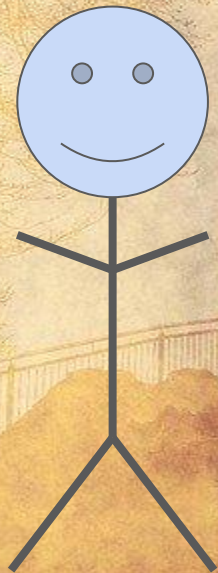




1



UNNECESSARY PAINT COMPLEXITY



OOF

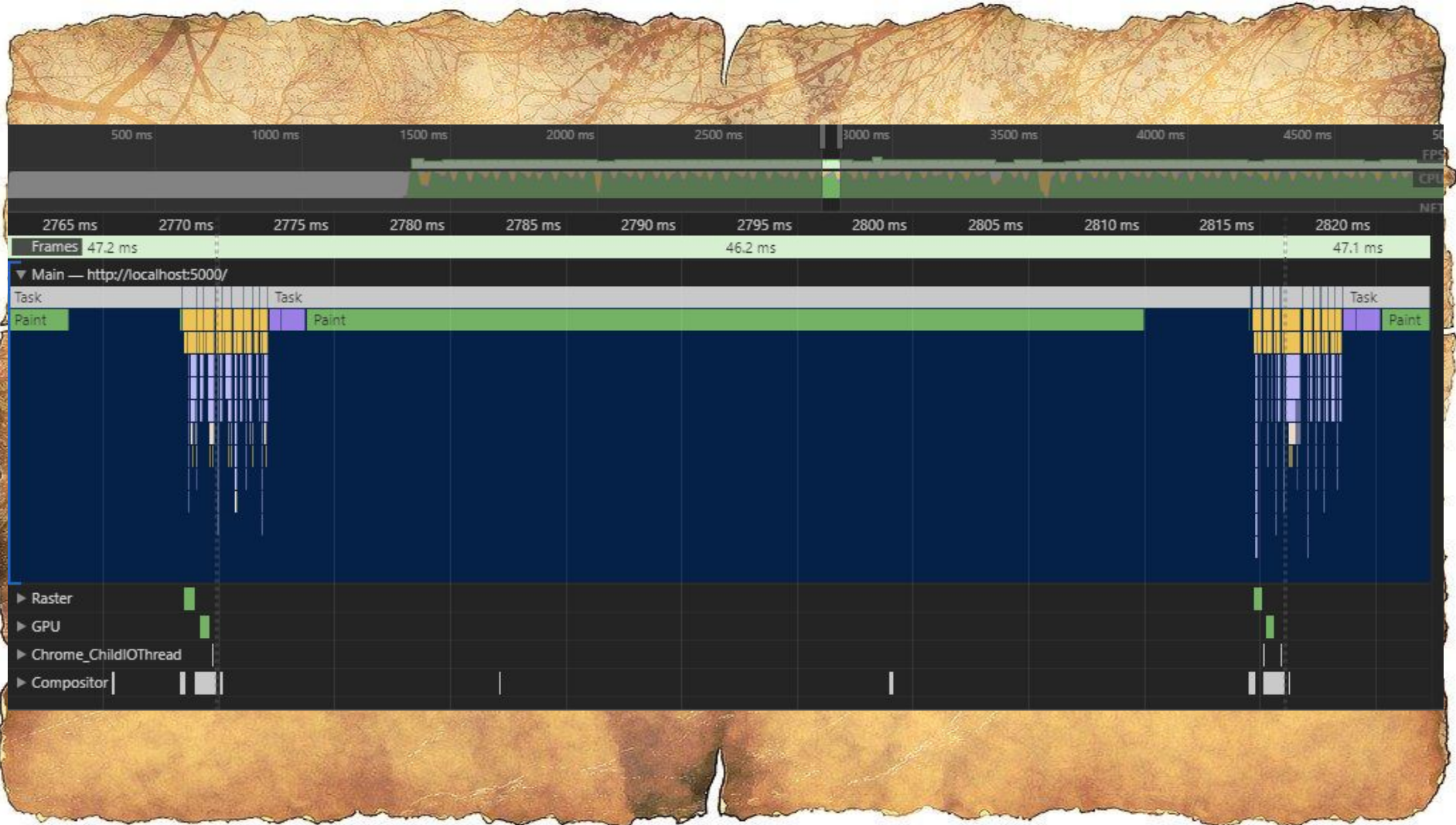


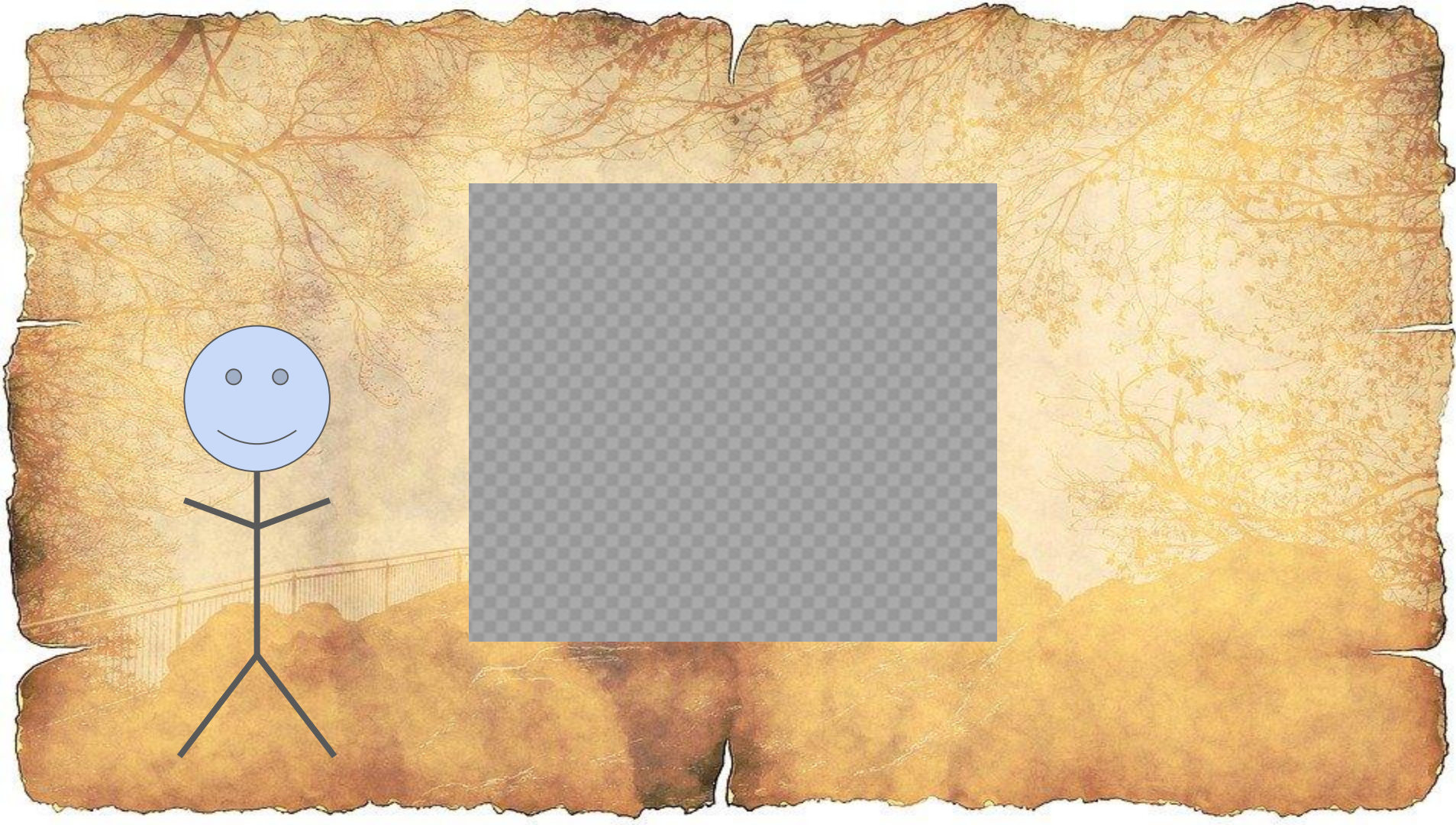
A watercolor illustration of a cemetery scene. In the center, a cross stands on a small hill. To the left, a fence runs along a path. Bare, leafless trees with thin branches frame the top and sides of the scene. The overall color palette is warm, featuring shades of yellow, orange, and brown, with a textured, aged paper appearance.

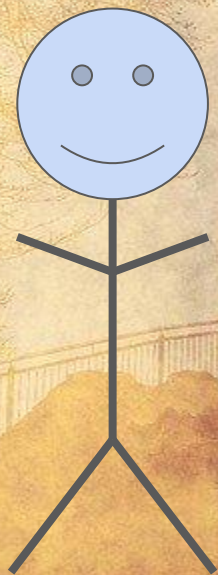
Results

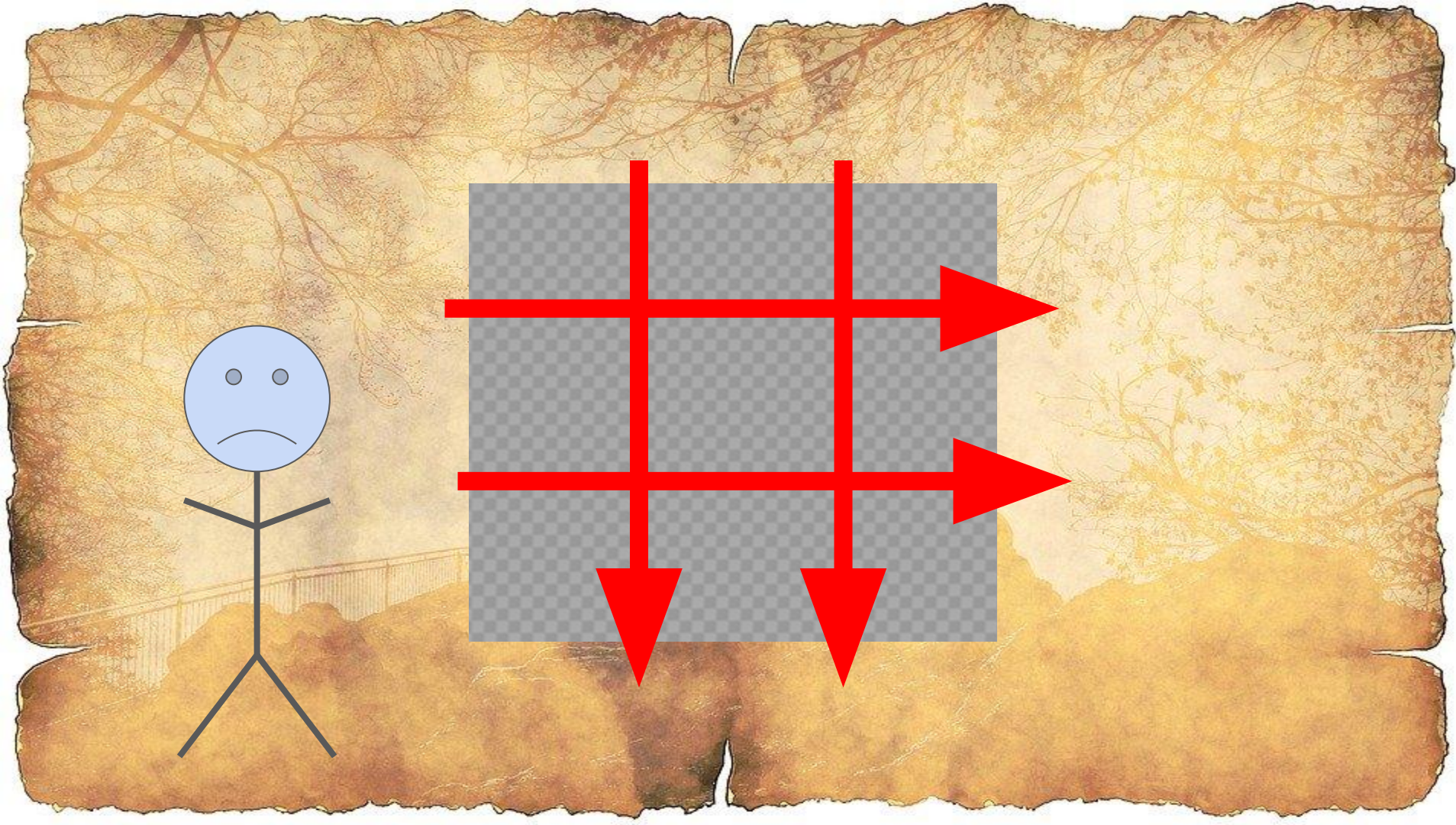
A watercolor illustration of a landscape. In the center, a cross stands on a hill. The foreground is filled with large, textured, golden-brown bushes or trees. The background shows a misty or hazy sky with faint outlines of trees. The entire scene is framed by a torn, aged paper border with a yellowish-brown tint.

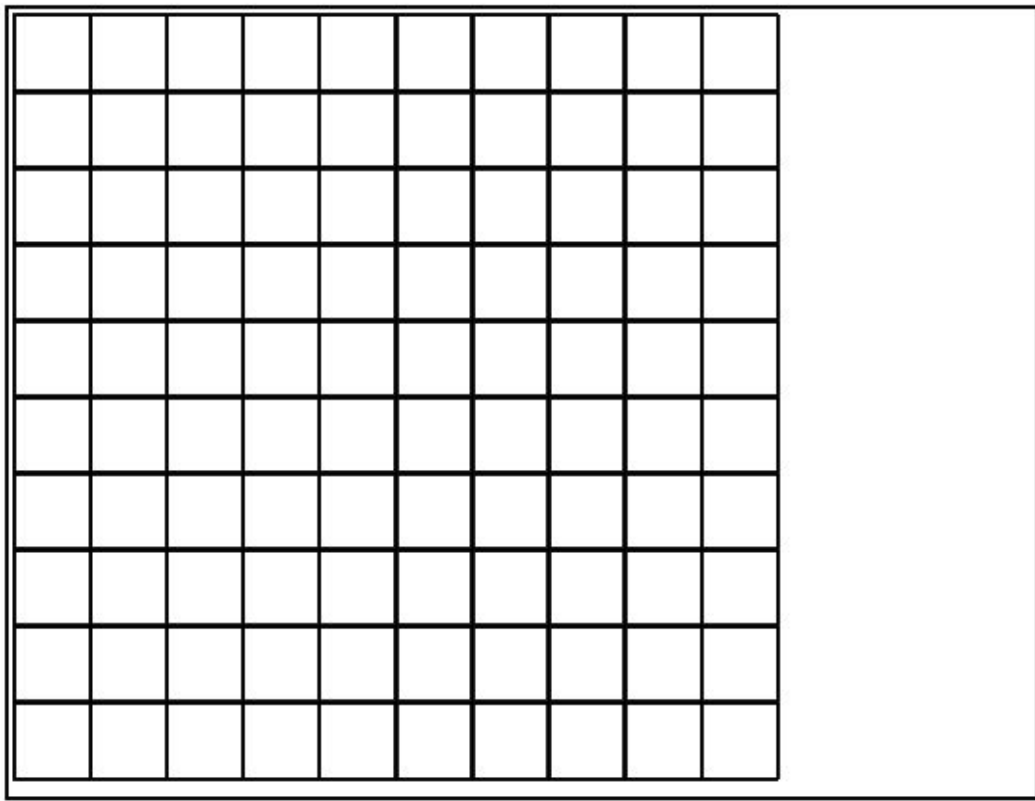
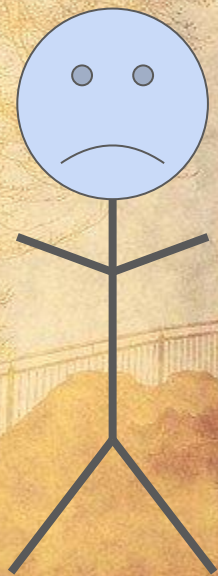
50.7 fps!

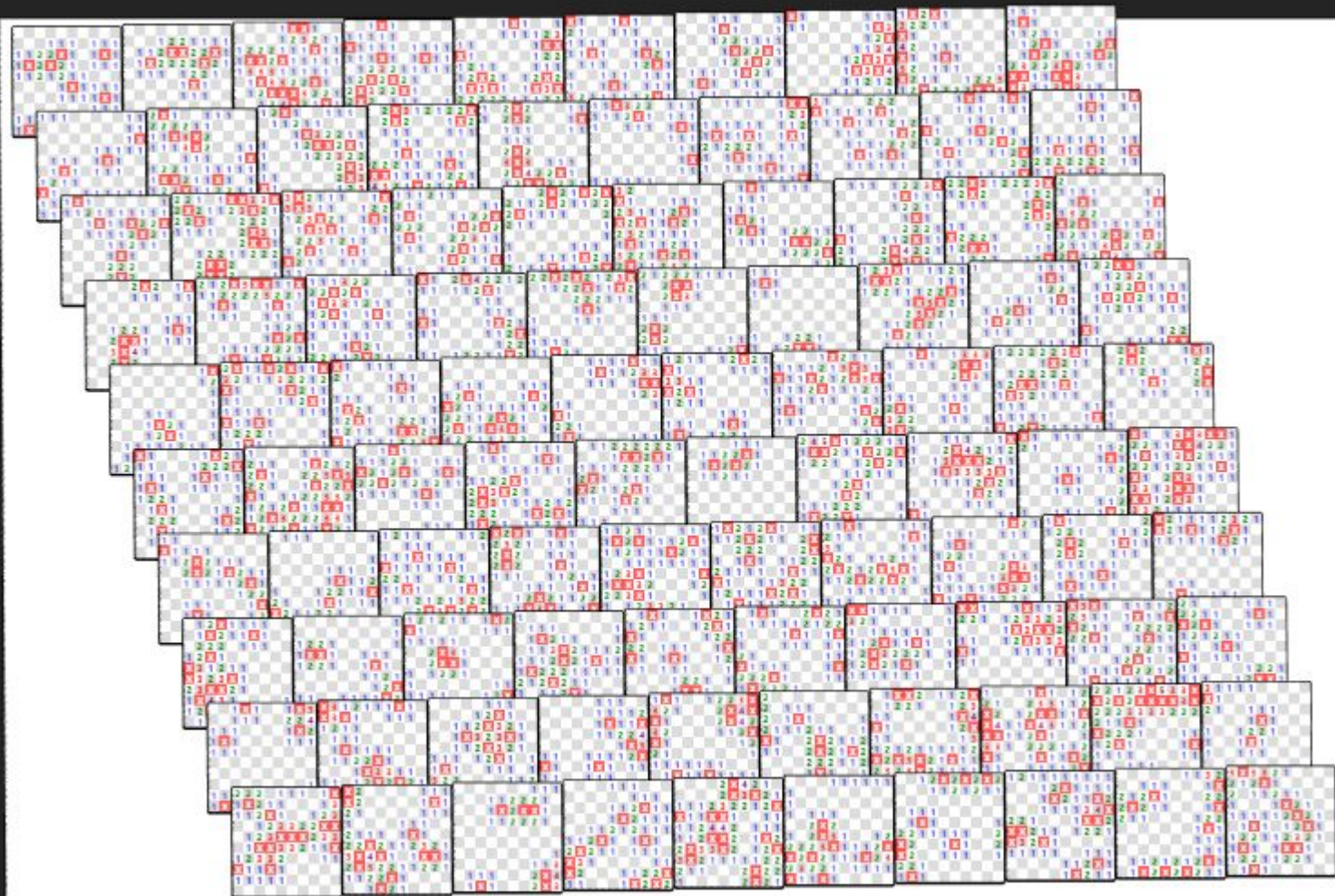




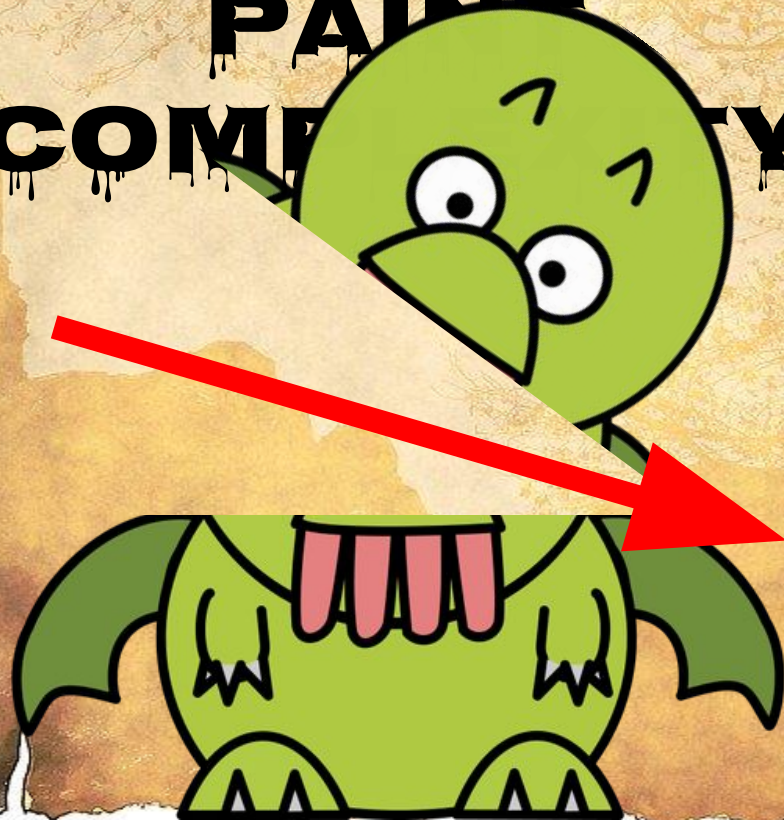
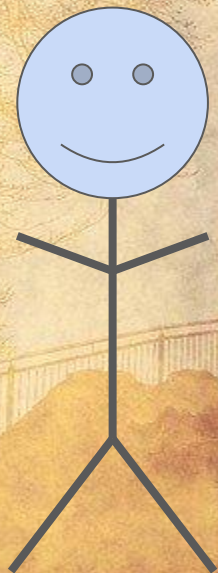








UNNECESSARY PAINT COMPLEXITY

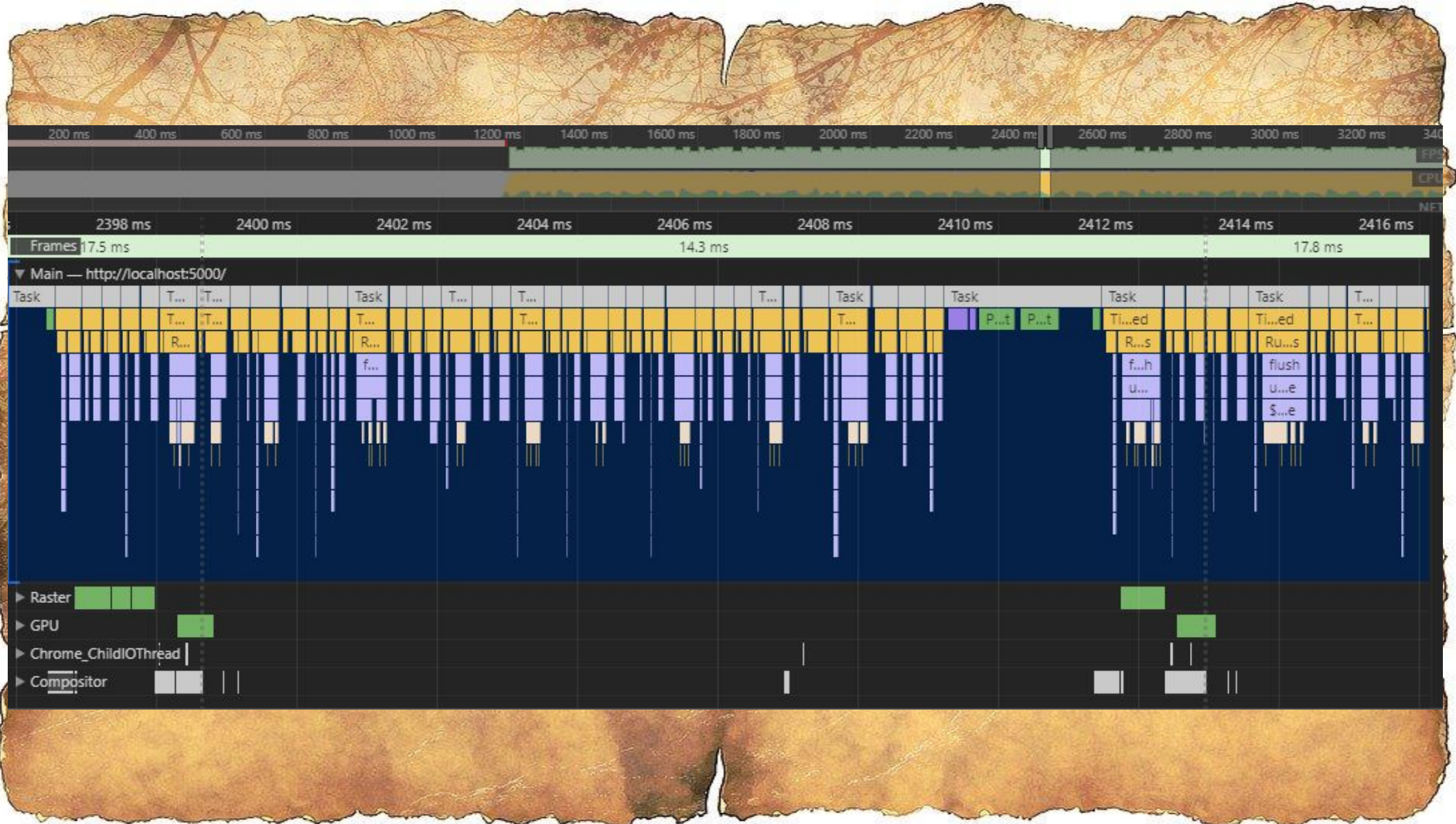


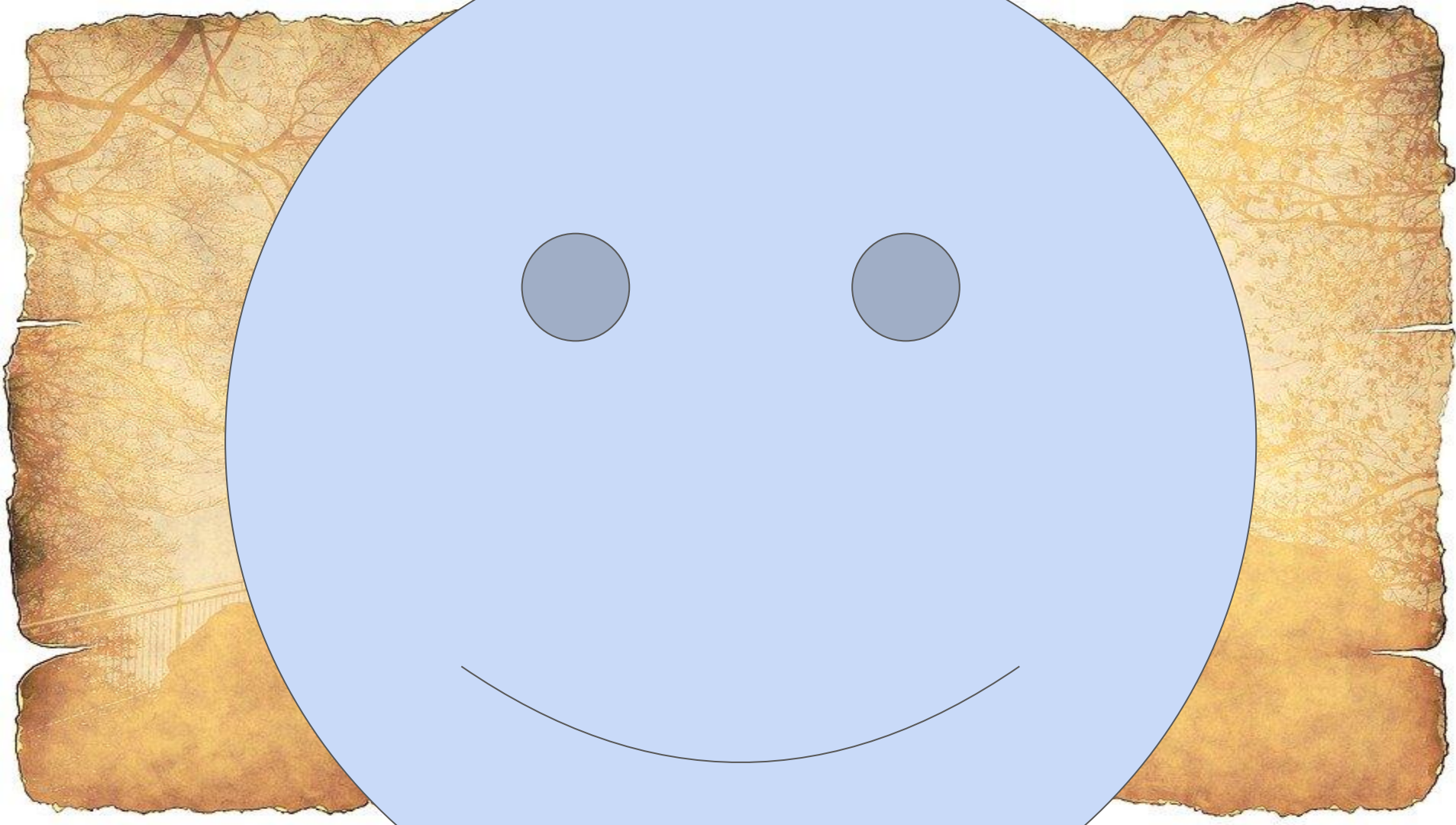
A watercolor illustration of a cemetery scene. In the center, a cross stands on a small hill. To the left, a fence runs along a path. Bare, leafless trees with intricate branch structures are scattered throughout the scene, particularly in the upper half. The color palette is dominated by warm, muted tones of yellow, orange, and brown, creating a somber and aged atmosphere. The word "Results" is written in a large, black, cursive script across the middle of the image.

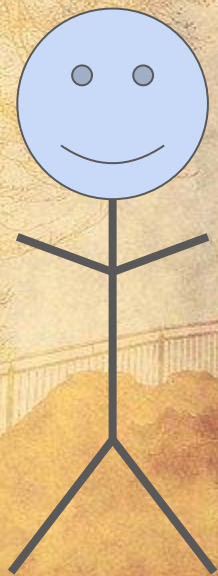
Results

A watercolor illustration of a landscape. In the center, a cross stands on a hill. To the left, a fence runs along a path. The background is filled with trees and foliage in warm, golden-brown tones. The text "60 fps!" is written in a large, black, handwritten font across the middle of the image.

60 fps!

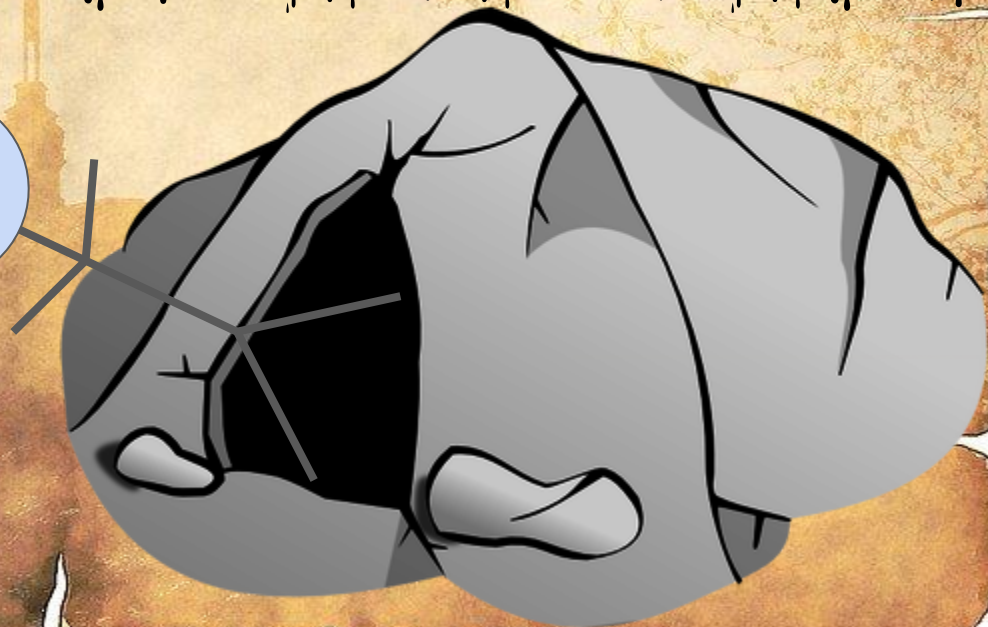


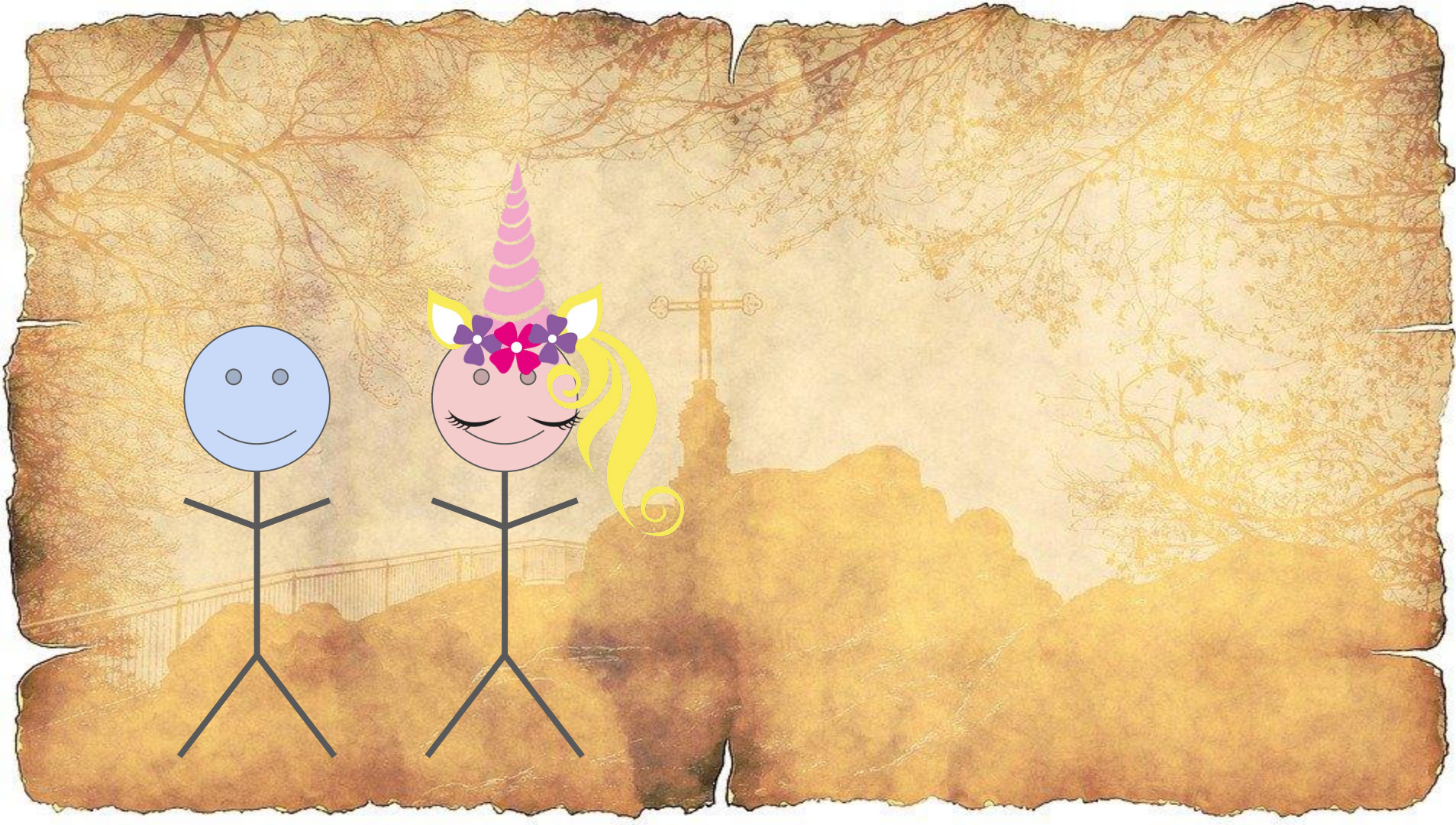




CAVE OF HTML RENDERING OPTIMISATION

Yeet



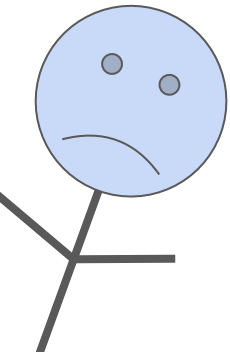


The end

Thanks

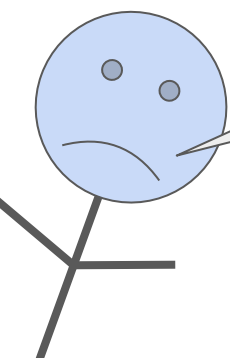
The end

Thanks

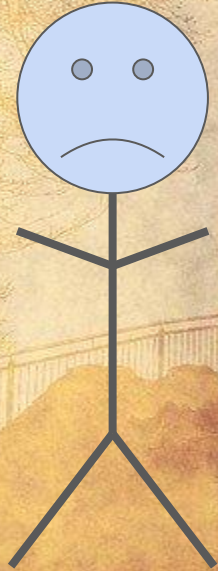


The end

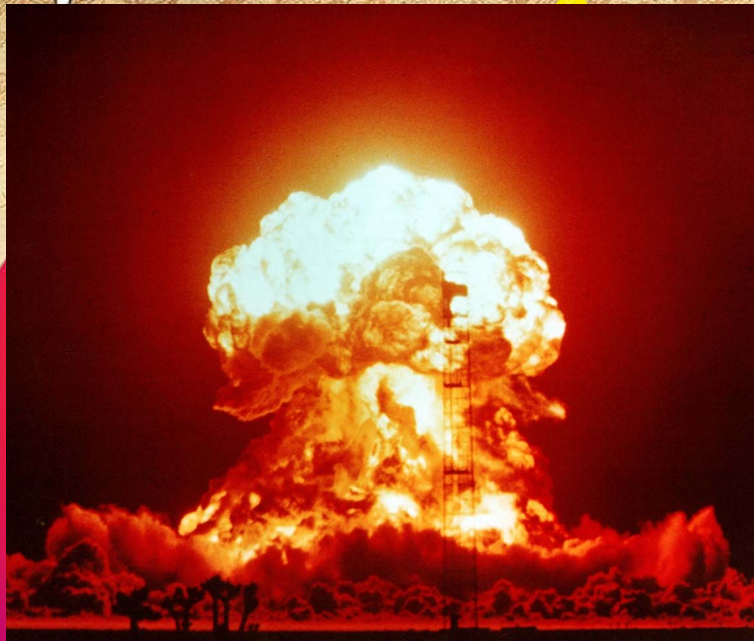
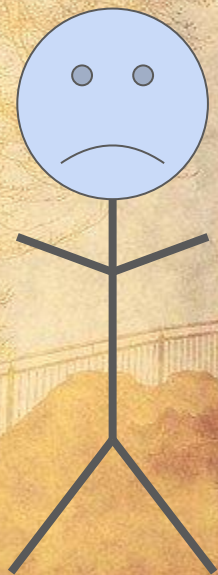
Thanks



Steven we have a
situation over here



*Does it work
in firefox?*

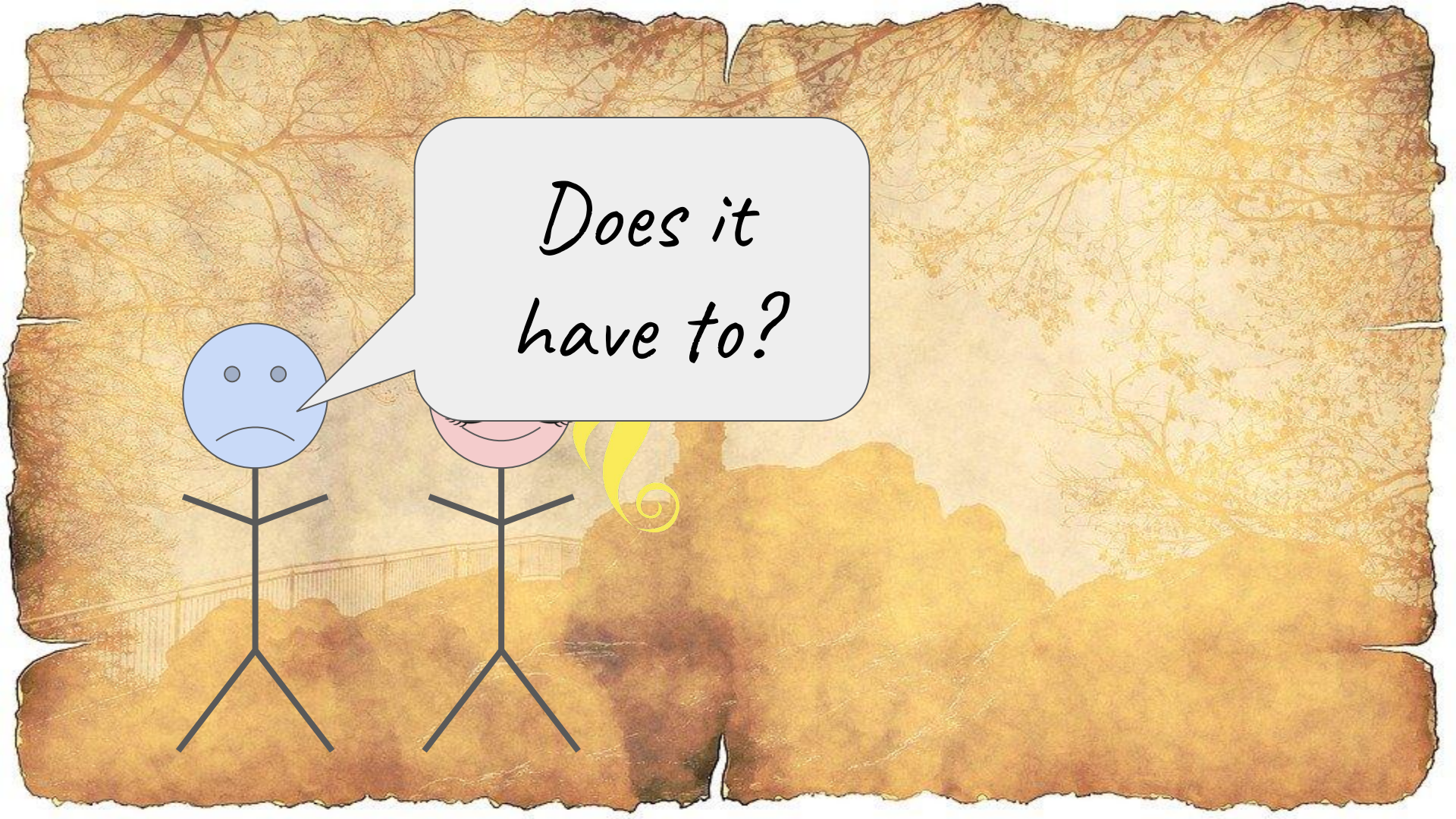


A watercolor illustration of a cemetery scene. In the center, a simple wooden cross stands on a small, grassy hill. To the left, a low stone wall or fence runs across the middle ground. The background is filled with the silhouettes of bare trees, their branches reaching upwards. The entire scene is rendered in a soft, painterly style with a palette of muted greens, browns, and greys. The text "30 fps..." is written in a large, black, handwritten-style font across the middle of the image, partially obscuring the cross and the background.

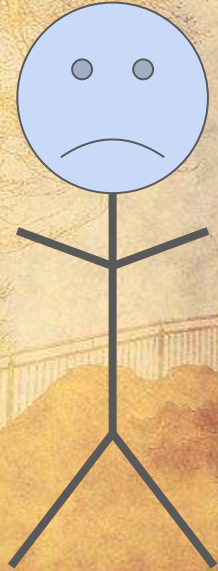
30 fps...



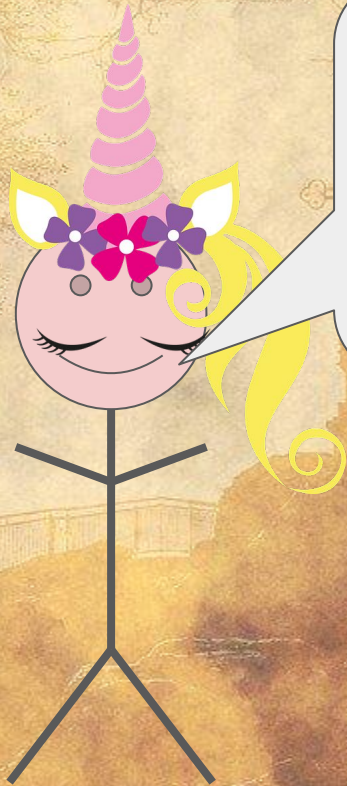
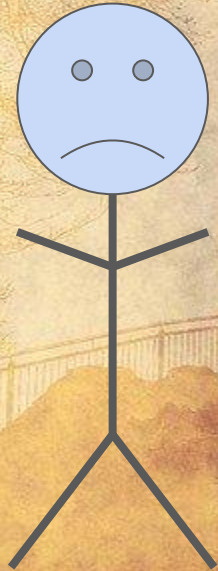
No



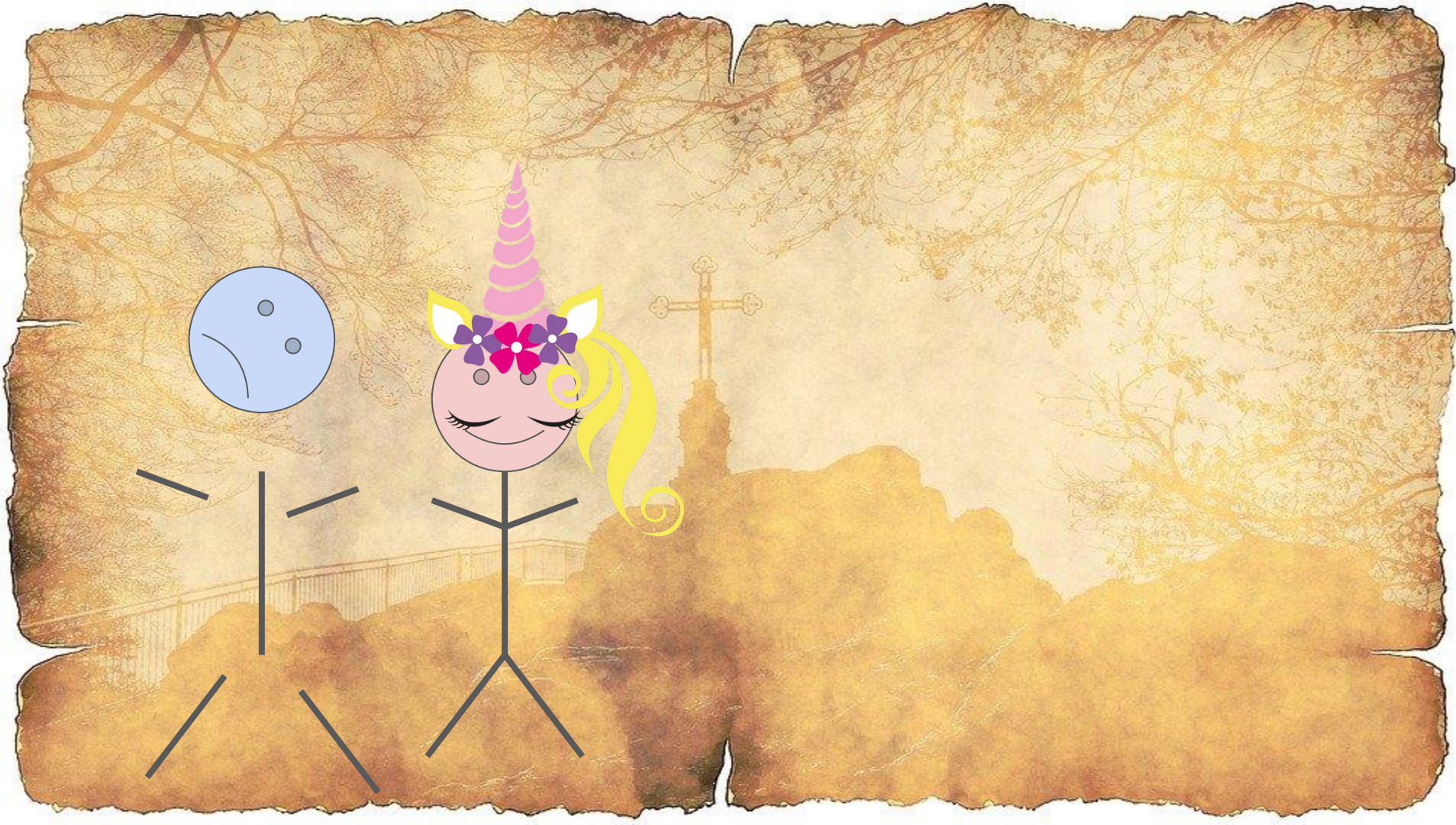
*Does it
have to?*



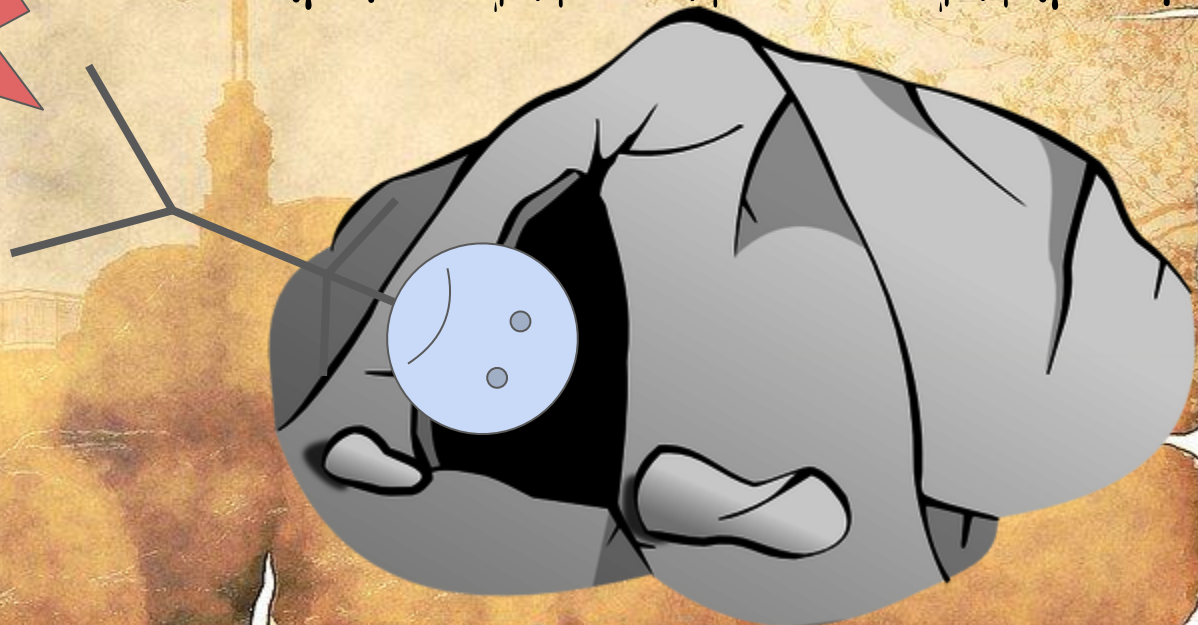
Yes please

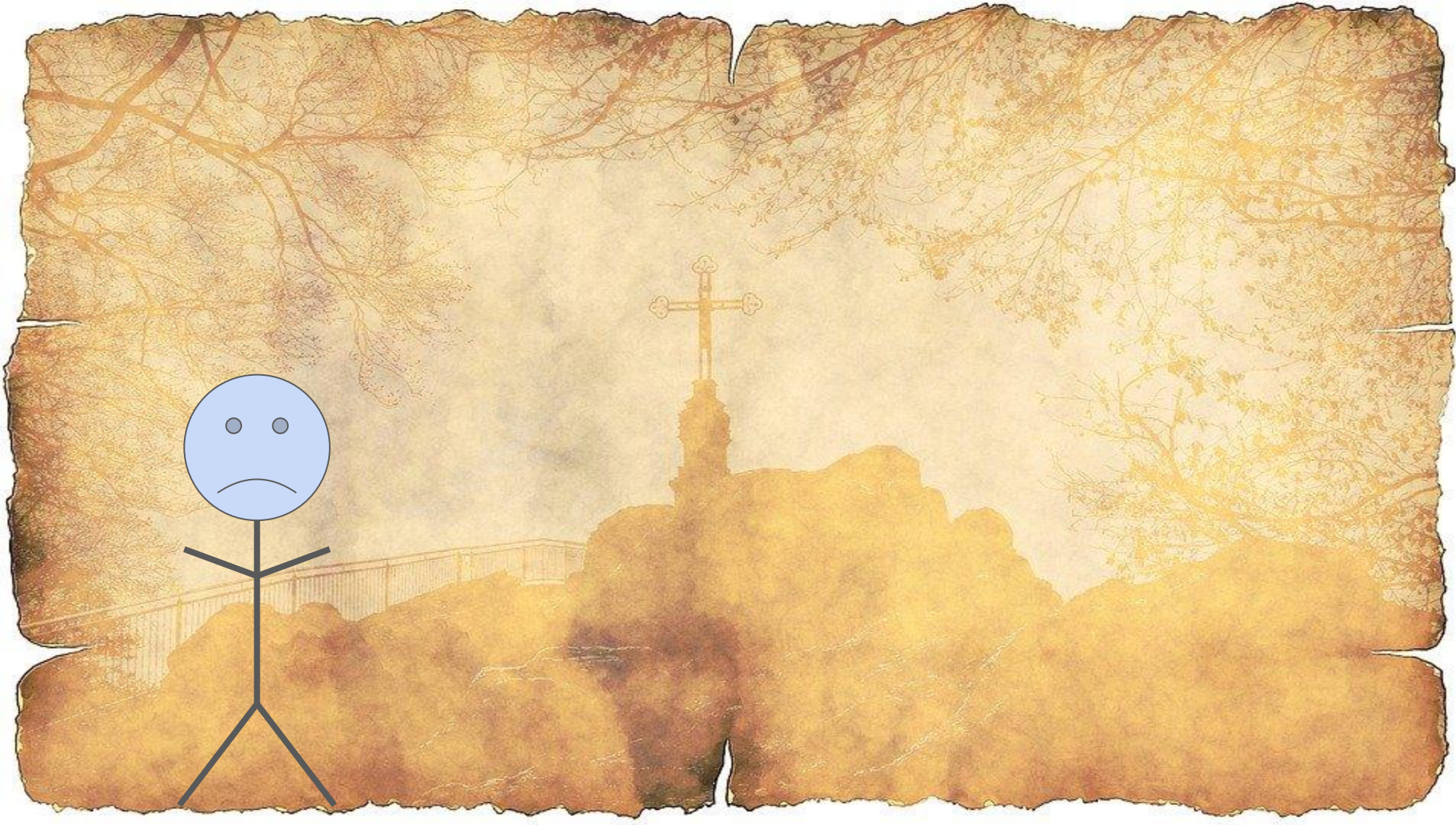


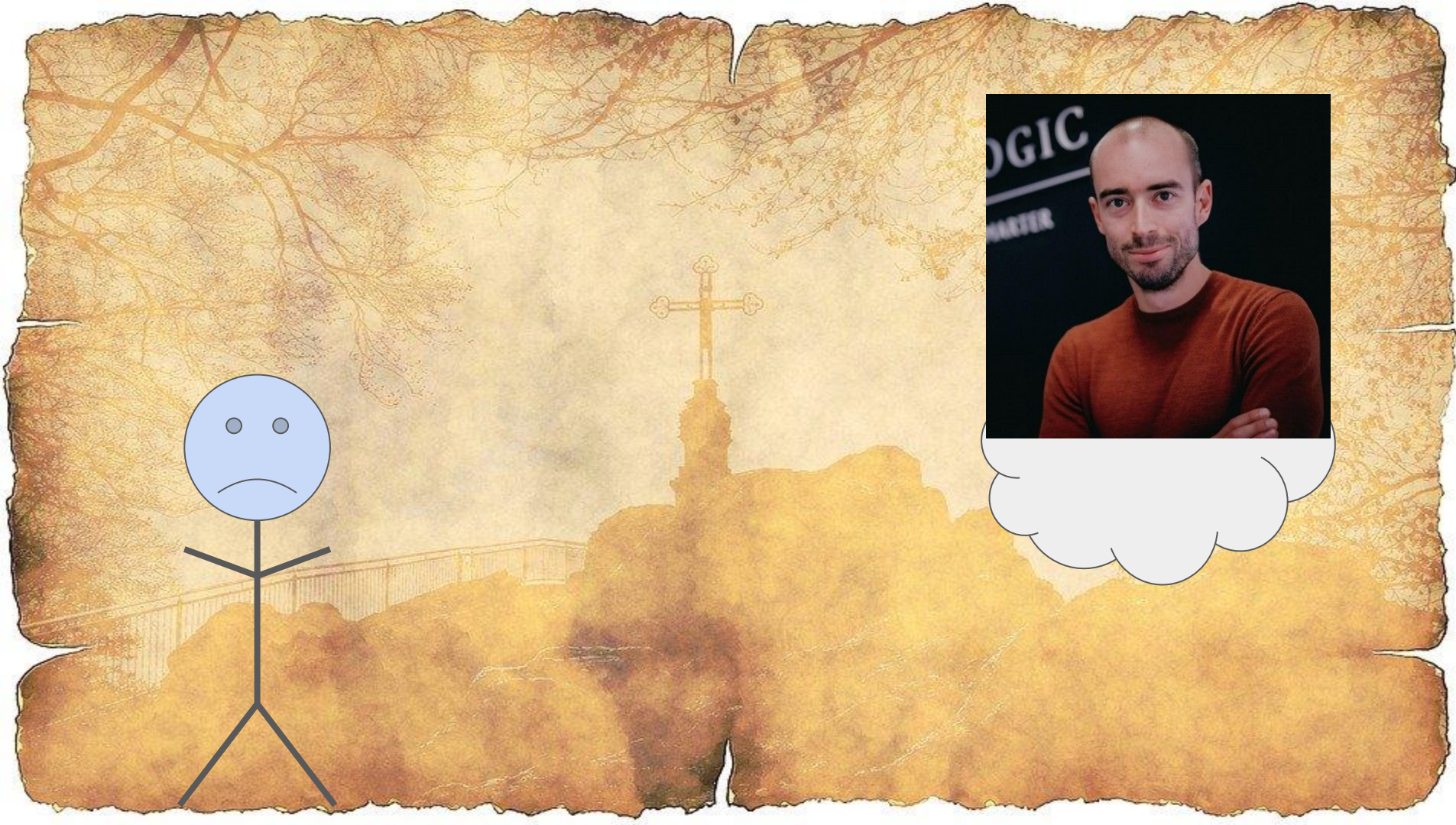
*If you could
that'd be gr8*



CAVE OF HTML RENDERING OPTIMISATION







*You could always
just use HTML5
canvas and then
you get full control*



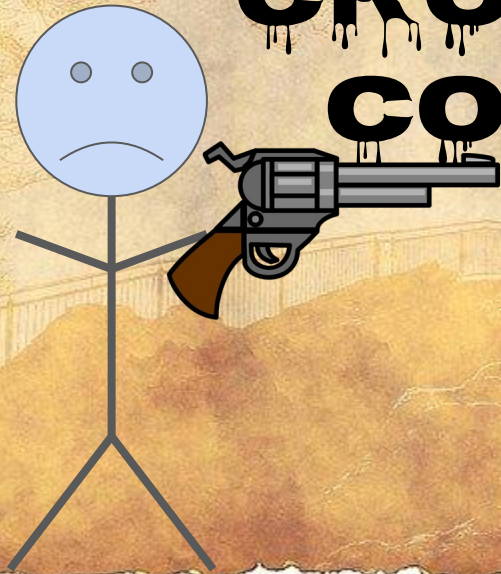
**EVIL UNICORN OF
HAVING TO USE HTML5
CANVAS FOR
CROSS-BROWSER
COMPATIBILITY**



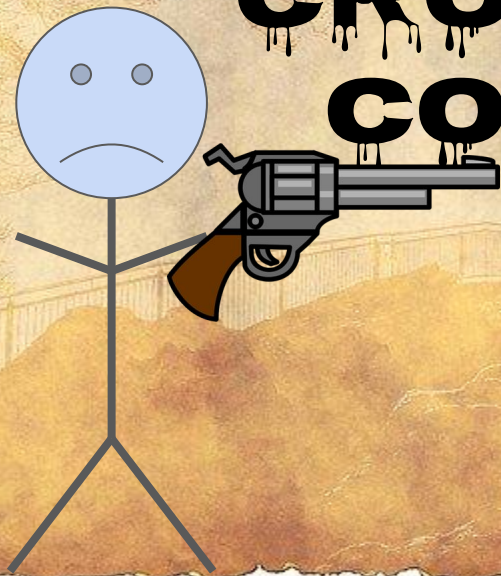
HTML



**EVIL UNICORN OF
HAVING TO USE HTML5
CANVAS FOR
CROSS-BROWSER
COMPATIBILITY**



EVIL UNICORN OF HAVING TO USE HTML5 CANVAS FOR CROSS-BROWSER COMPATIBILITY

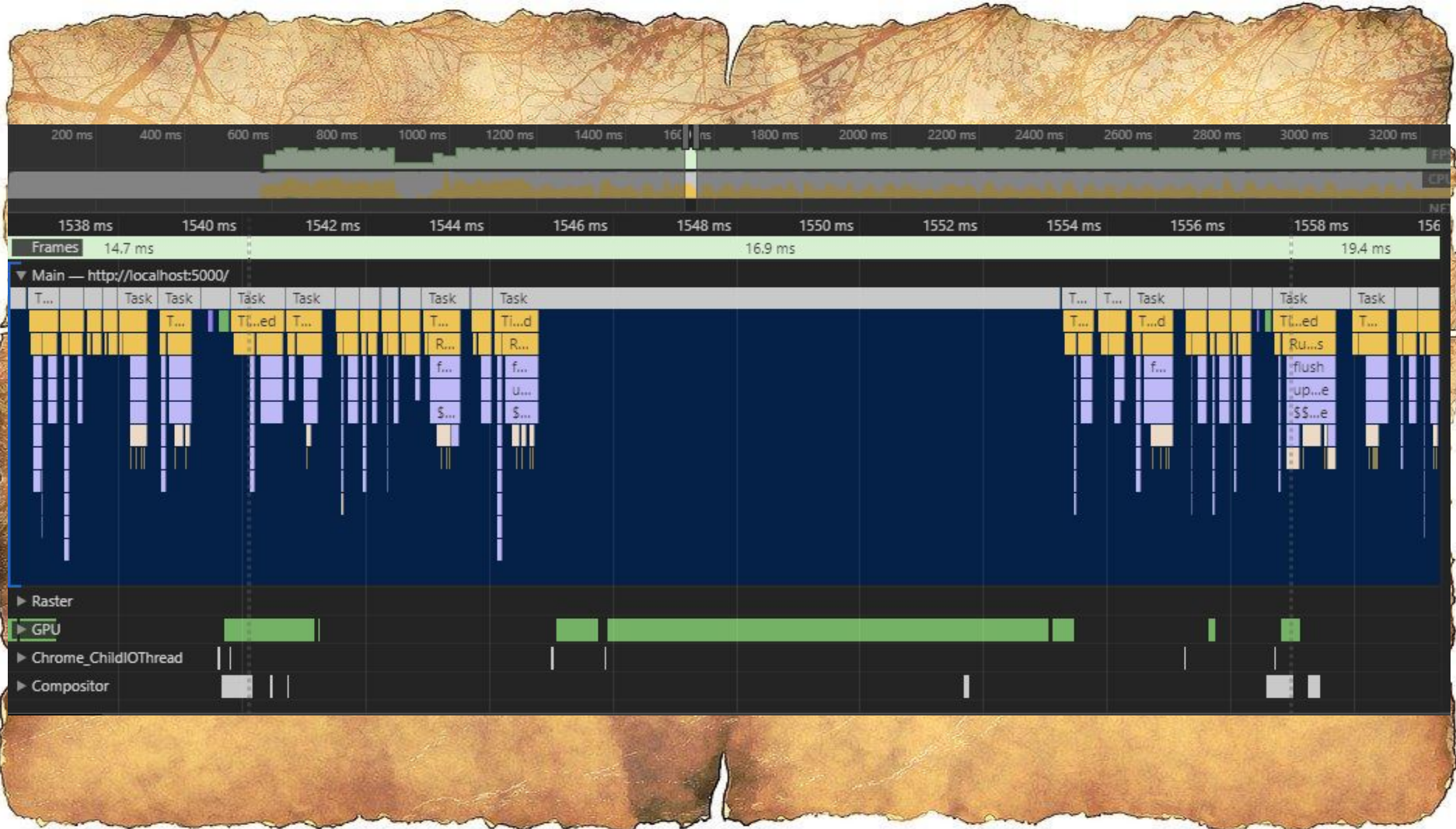


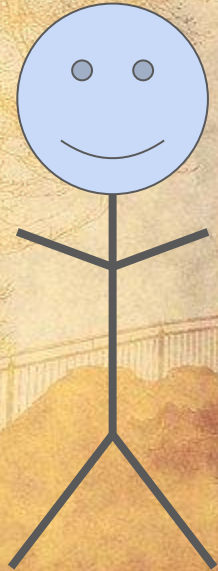
A watercolor illustration of a cemetery scene. In the center, a cross stands on a small hill. To the left, a fence runs along a path. The background is filled with bare trees and a hazy sky. The entire scene is rendered in warm, golden-brown tones with a textured, aged paper appearance.

Results

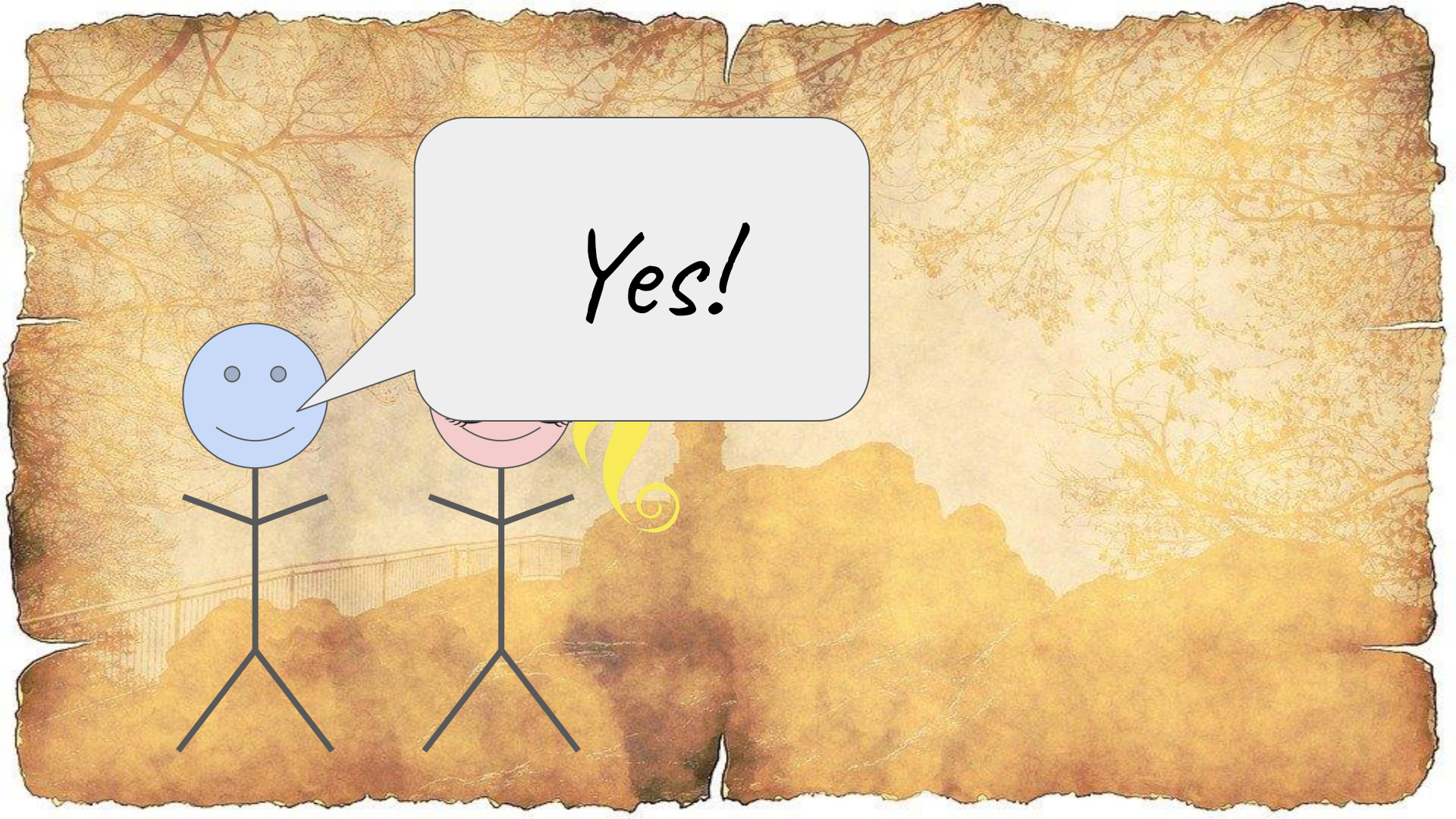
A watercolor illustration of a landscape. In the center, a cross stands on a hill. To the left, a fence runs along a path. The background is filled with trees and foliage in warm, golden-brown tones. The text "60 fps!" is written in a large, black, handwritten font across the middle of the image.

60 fps!



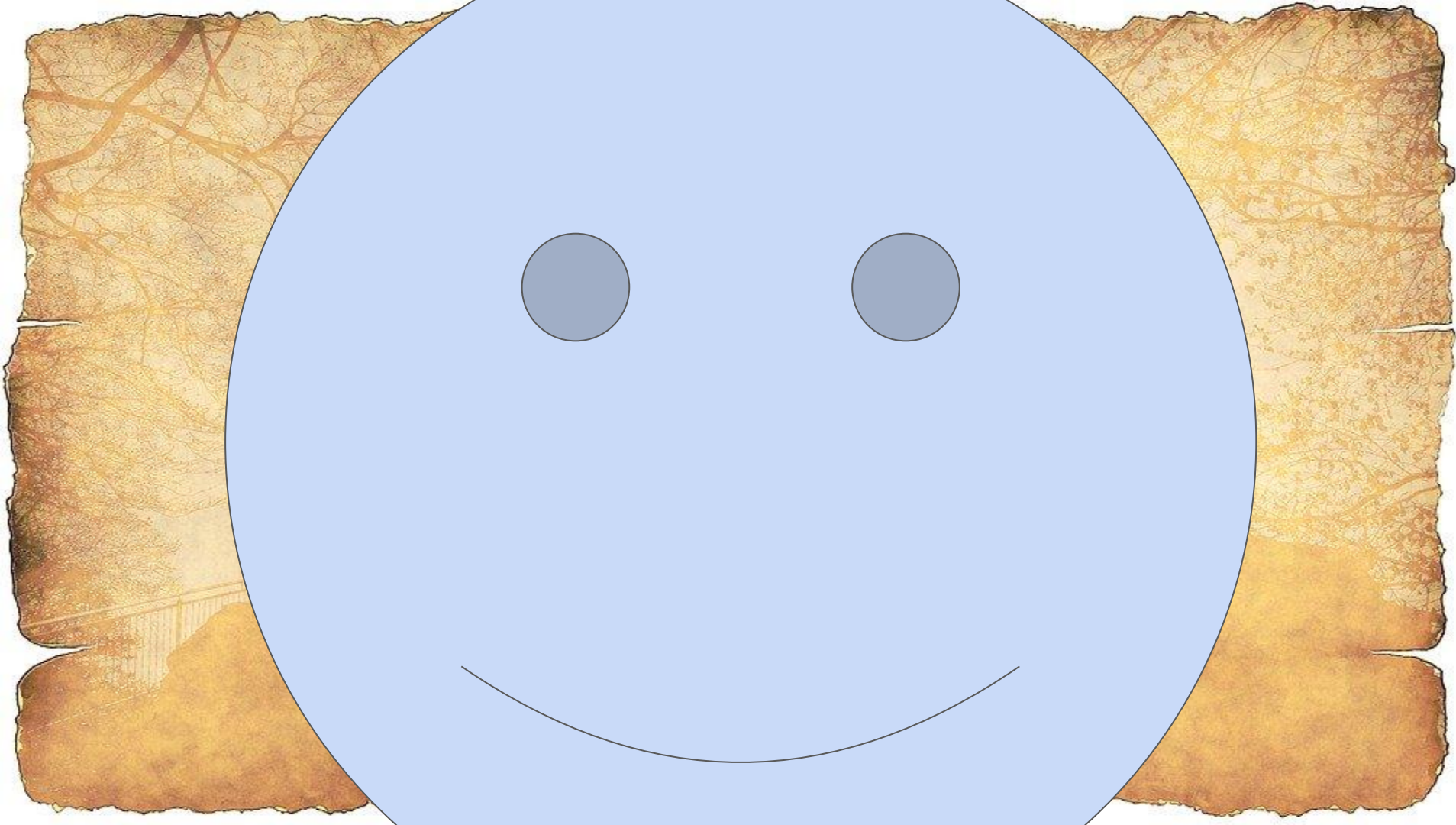


*Does it work
in firefox?*



The image features two stick figures on a textured, brownish-gold background that resembles aged paper or parchment. The figure on the left has a blue circular head with two small grey dots for eyes and a simple curved line for a smile. The figure on the right has a pink circular head with a similar smile and a yellow, curly hair-like shape extending from the back. A large, white, rounded rectangular speech bubble originates from the pink figure's head and contains the word "Yes!" in a black, handwritten-style font. The background has a mottled, fibrous texture with darker brown areas at the bottom and lighter tan areas at the top.

Yes!



Read the blog post

GitHub @StevenWaterman
Twitter @SteWaterman
Website **StevenWaterman.uk**

The End

Try it yourself:
optimisation.StevenWaterman.uk

P.S. Look up *The Hero's Journey*