

# Javascript THM Template

## (Reference sheet)

Public members	Description
.boolSimulate	Boolean flag set by the template. True means the demo is running on the local server and false means the demo is running on the MonocleCAT website
.plugin	Memory reference to the plugin object for internal modification
.width	Integer of the width of the plugin which is passed in from the constructor call
.height	Integer of the height of the plugin which is passed in from the constructor call
.travelTime	Number the amount of time in seconds it takes for a panel to extend or retract
.funcExploreInit	<b>Obsolete</b> Function pointer an obsolete way of initiating explore mode use .scnExplore.initQuiz function pointer instead
.funcExploreCleanUp	<b>Obsolete</b> Function pointer an obsolete way of cleaning up explore mode use .scnExplore.cleanUp function pointer instead
.scnExplore	Scene pointer the explore mode scene. For explore to work you must set the .boolExplore flag to true
.boolExplore	Boolean flag set by the developer for enabling explore mode. If true the demo starts in explore mode and if false the demo starts at question one.
.boolExploring	Boolean flag set by the template. If true then the user is currently in explore mode otherwise the flag is set false
.expLayer	<b>Obsolete</b> Memory reference which is an obsolete layer created by plugin for drawing explore mode in the correct z-order
.scnLast	Memory reference to the last scene.
.numTimeStart	Integer for the start countdown for the obsolete step timer
.numTimeLeft	Integer for the time left in the countdown for the obsolete step timer
.answerID	Integer for the interval ID of the obsolete step timer
.currentScene	Integer for the current scene number
.currentStep	Integer for the current step number in the current scene
.totalScenes	Integer for the total scenes in the demo (not the total steps)
.totalFinished	Integer for the total number of scenes the user has answered
.demo_name	String of the demo name which is sent to the server
.submissionRetryID	Integer for the interval ID of the persistent submission
.layoutFrameSprite	Sprite containing the background of the demo
.answerPanelLayer	Layer containing the answer panel sprite which extends lefts
.submitButton	Button for submit answers to the server
.answerButton	Button for the show answer animation
.readyButton	Explore mode only button to let the user exit explore mode
.wifiGreySprite	Sprite of a grey wifi single to show no connection yet
.wifiGreenSprite	Sprite of a green wifi single to show no connection yet
.wifiBlueSprite	Sprite of a blue wifi single to show no connection yet
.checkSprite	Sprite of a checkmark to show the user answer the question correctly

.crossSprite	Sprite of a 'X' to show the user answer the question incorrectly
.answerPanelSprite	Sprite of the answer panel on the right of the screen
.revealLabel	<b>Obsolete</b> displays the time left until the show answer is revealed
.questionLabel	Label uses for displaying the question text of each scene
.titleLabel	Label uses for displaying the title of the demo
.bottomPanelLayer	Layer containing the navigation panel sprite which extends up
.demoStatusSprite	Sprite of a text box which displays the number of submissions left
.previousSceneButton	Button which sets the demo to the previous scene
.nextSceneButton	Button which sets the demo to the next scene
.refreshButton	Button which resets the current scene of the demo
.exploreButton	Button which sets the demo to explore if it exists
.bottomPanelHoverSprite	Invisible sprite that triggers the bottom panel to extend
.answerPanelHoverSprite	Invisible sprite that triggers the answer panel to extend
.problemAreaHoverSprite	Invisible sprite that triggers the answer panel and the bottom to retract keeping the them for getting stuck
.bottomPanelHoverArrowSprite	Sprite of an arrow to indicate that the bottom panel extends
.answerPanelHoverArrowSprite	Sprite of an arrow to indicate that the answer panel extends
.progressBarSprite	Sprite of the a empty red progress bar
.progressBarLabel	Label of the word "Progress"
.progressBarCount	Label of how many scene have been answer out of how many total scene there are
.progressLeftSprite	Sprite of the green left cap of the progress bar
.progressRightSprite	Sprite of the green right cap of the progress bar
.progressMiddleSprite	Sprite of the green middle of the progress bar
.triesLabel	Label of how many tries the student has for the current scene
.instructionsSprite	Sprite of the background images for the instruction dialog box
.instructionsButton	The OK button in the for the instruction dialog box
.instructionsLabel	Label for the words "Instructions" in the instruction dialog box
.instructionsTextLabel	Label the instruction text in the instruction dialog box
.problemLayer	Layer the background image of the entire demo
.curtainLayer	Layer a 50% black box that covers the screen
.panelState	The list of answer and bottom panel states RETRACTED : 0 – The panel is completely retracted EXTENDING : 1 – The panel is in the process of extending EXTENDED : 2 – The panel has completely extended RETRACTING : 3 – The panel is in the process of retracting
.bottomPanelState	Integer which records the current state of the bottom panel
.answerPanelState	Integer which records the current state of the answer panel
.bottomPanelLock	Boolean flag that if true prevents the bottom panel from moving
.answerPanelLock	Boolean flag that if true prevents the answer panel from moving
.Mouse	Mouser class which track the status of the mouse and weather the mouse is currently in the plugin.
.sceneArray	An array of every scene in the demo
.quizNames	An array of strings for each quiz name
.headerClipping	<b>Obsolete</b> the amount the space to clip the top of the plugin
.footerClipping	<b>Obsolete</b> the amount the space to clip the bottom of the plugin

## Public methods

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### setupScene()

Adds the problemLayer and bgLayer to the passed scene

Parameters:

Scene – The scene to be prepared for use

Returns:

None

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### getWindowClipping()

**Obsolete** tells the website how much of the plugin should be clipped

Parameters:

None

Returns:

An array with the first element is the .headerClipping and the second is .footerClipping

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### showAnswer()

Called when the user presses the “Show answer” button and it runs the answer animation of the current scene.

Parameters:

x – An integer of the current x mouse position

y – An integer of the current y mouse position

Returns:

None

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### submitAnswer()

Called when the user presses the “Submit” button and it then tries to send the users answer to monocleCAT.

Parameters:

None

Returns:

None

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### bottomPanelHoverCallback()

Called when the user moves the mouse to the bottom side and if the bottom panel is fully retracted it triggers the bottom panel to extend.

Parameters:

x – An integer of the current x mouse position

y – An integer of the current y mouse position

Returns:

None

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### answerPanelHoverCallback()

Called when the user moves the mouse to the right side and if the answer panel is fully retracted it triggers the answer panel to extend.

Parameters:

x – An integer of the current x mouse position

y – An integer of the current y mouse position

Returns:

None

---

problemAreaHoverCallback()

Called when the user moves the mouse in the middle and if the answer or bottom panel is fully extend it triggers it to retract.

Parameters:

x – An integer of the current x mouse position

y – An integer of the current y mouse position

Returns:

None

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retractAnswerPanel()

Called internally to retract the answer panel. This function does nothing if the Boolean flag answerPanelLock is true.

Parameters:

None

Returns:

None

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extendAnswerPanel()

Called internally to extend the answer panel. This function does nothing if the Boolean flag answerPanelLock is true.

Parameters:

None

Returns:

None

---

retractBottomPanel()

Called internally to retract the bottom panel. This function does nothing if the Boolean flag bottomPanelLock is true.

Parameters:

None

Returns:

None

---

extendBottomPanel()

Called internally to extend the bottom panel. This function does nothing if the Boolean flag bottomPanelLock is true.

Parameters:

None

Returns:

None

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answerMoveDone()

Called internally after the answer panel has extended or retracted. This function updates the current state of answerPanelState.

Parameters:

instance – The instance of the plugin usually this or window

Returns:

None

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bottomMoveDone()

Called internally after the bottom panel has extended or retracted. This function updates the current state of bottomPanelState.

Parameters:

instance – The instance of the plugin usually this or window

Returns:

None

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resetButtonClickCallback()

Called when the user presses the reset button and it runs the loadQuiz() function for the current scene.

Parameters:

x – An integer of the current x mouse position

y – An integer of the current y mouse position

Returns:

None

---

setTitle()

Called by the developer to change the title of the demo

Parameters:

title – String to set the new title with.

Returns:

None

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setTries()

Called by the developer to set the amount of tries in the passed scene

Parameters:

tries – Number of tries for the passed scene

scene – The scene that the number of tries are changed for

Returns:

None

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getScene()

Called by the developer to find get the actual scene reference

Parameters:

scene – The question number of the desired scene

step – The step number of the desired scene

Returns:

A reference to the requested scene

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getCurrentScene()

Called by the developer to find get the current scene reference

Parameters:

None

Returns:

A reference to the current scene

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getSceneNumber()

Called by the developer to find get the current scene number and step number

Parameters:

None

Returns:

An array of the current question number and step number

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getFlatSceneList()

Called internally to get an one dimensional array of the scenes

Parameters:

None

Returns:

An one dimensional array of all the scenes.

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onUpdate()

Called internally when the preloader is done loading one resource then it update the loading progress bar.

Parameters:

increment – How many resources have been loaded

total – How many total resources need to be loaded

Returns:

None

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begin()

Called by the developer to signal the start of the demo. All preloading and scene initialization occurs here.

Parameters:

None

Returns:

None

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nextScene()

Called when the user click the next scene button. This cleans up the old scene and sets the next scene to be drawn.

Parameters:

None

Returns:

None

---

nextScene()

Called when the user click the next scene button. This cleans up the old scene and sets the next scene to be drawn.

Parameters:

None

Returns:

None

---

changeScene()

Called internally to change the current scene and UI. Does not do any clean up.

Parameters:

Scene – Reference to the scene to change to

Returns:

None

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changeStep()

**Obsolete** Called internally to change the current step and UI. Does not do any clean up.

Parameters:

Scene – Reference to the step in the current scene to change to

Returns:

None

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prevScene()

Called when the user click the previous scene button. This cleans up the old scene and sets the previous scene to be drawn.

Parameters:

None

Returns:

None

---

answerCallback()

**Obsolete** called internally to track the reveal timers status.

Parameters:

instance – The instance of the plugin usually this or window

Returns:

None

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drawUI()

Called internally on each scene change to add all the UI as children of the current scene.

Parameters:

None

Returns:

None

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updateUI()

Called internally whenever the demo status changes. This visually updates the user of what is happening internally.

Parameters:

None

Returns:

None

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showCurtain()

Called by the developer to show the 50% black layer and block user interaction.

Parameters:

None

Returns:

None

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hideCurtain()

Called by the developer to hides the 50% black layer and restores user interaction.

Parameters:

None

Returns:

None

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showInstructions()

Called internally to show the user the instruction dialog and the curtain.

Parameters:

None

Returns:

None

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hideInstructions()

Called by the user pressing the “OK” button in the instruction dialog which removes the dialog, the curtain and starts the demo

Parameters:

None

Returns:

None

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setInstructionText()

Called by the developer to change the displayed text in the instruction dialog box

Parameters:

text – String of the new instruction text

Returns:

None

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gotoScene()

Called by the developer to change current scene to the passed scene

Parameters:

numQ – Number of the question to set current scene to.

numS – Number of the step to set the current scene to.

Returns:

None

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stepDone()

**Obsolete** called by the developer to signal that a step question has been completed

Parameters:

numQ – Number of the question to set done.

numS – Number of the step to set done.

Returns:



None

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gotoExplore()

Called by the user pressing the “?” button. It cleans up the current scene and displays the explore scene.

Parameters:

None

Returns:

None

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startExplore()

Called internally or by the user pressing the “?” button. This records the current scene and display the explore scene on top of it.

Parameters:

None

Returns:

None

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endExplore()

Called by the user pressing the “Go to quiz” button. This return the current scene to the recorded last scene.

Parameters:

None

Returns:

None

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js\_getDemoName()

Called by monocleCAT and returns the demo name to the server.

Parameters:

None

Returns:

A string of the demos name

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js\_setDemoName()

Called by monocleCAT and sets a new demo name.

Parameters:

newName:String – The new name of the demo

Returns:

None

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js\_getNumberOfQuizzes()

Called by monocleCAT and returns the number of quizzes to the server.

Parameters:

None

Returns:

An integer number of quizzes

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js\_getQuizNames()

Called by monocleCAT and returns the name of each quiz to the server.

Parameters:

None

Returns:

An array of strings with the name of each question

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js\_onQuizSubmit()

Called by monocleCAT and lets the demo know the server has received an answer.

Parameters:

result1:String – The quiz name which has been received by server

result2:String – The true/false which has been received by server

Returns:

None

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persistentSubmission()

Called by submitQuiz and calls itself every 10 seconds attempting to send the users' answer to the server. Once the server calls js\_onQuizSubmit the demo stops sending it's answer.

Parameters:

None

Returns:

None