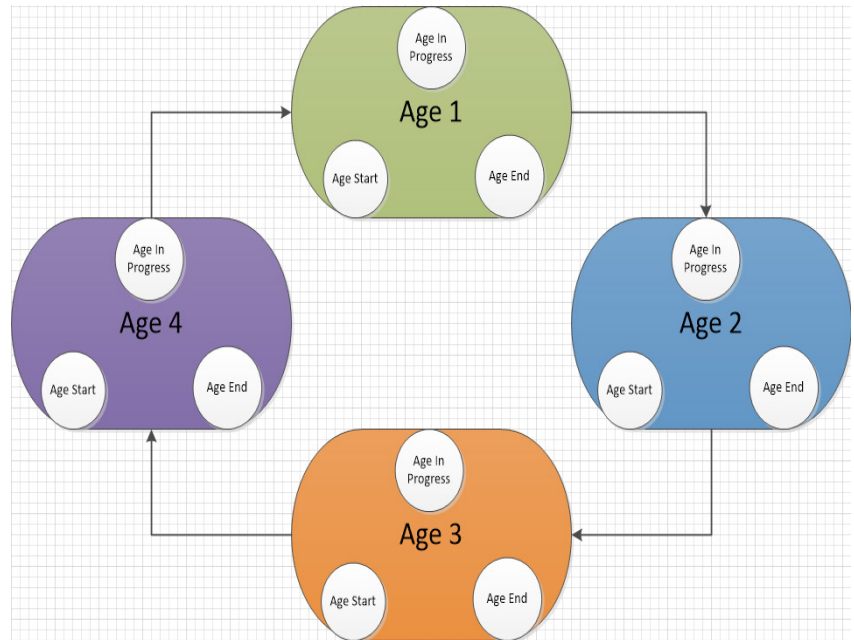
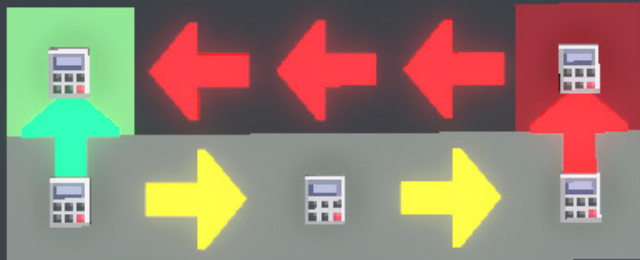


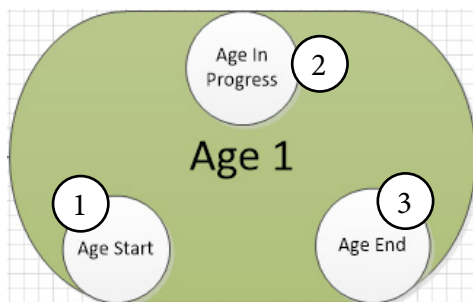
M.E.M.E

(MODIFICATION OF ENVIRONEMENT FOR MULTIVERSE EXPERIENCES)

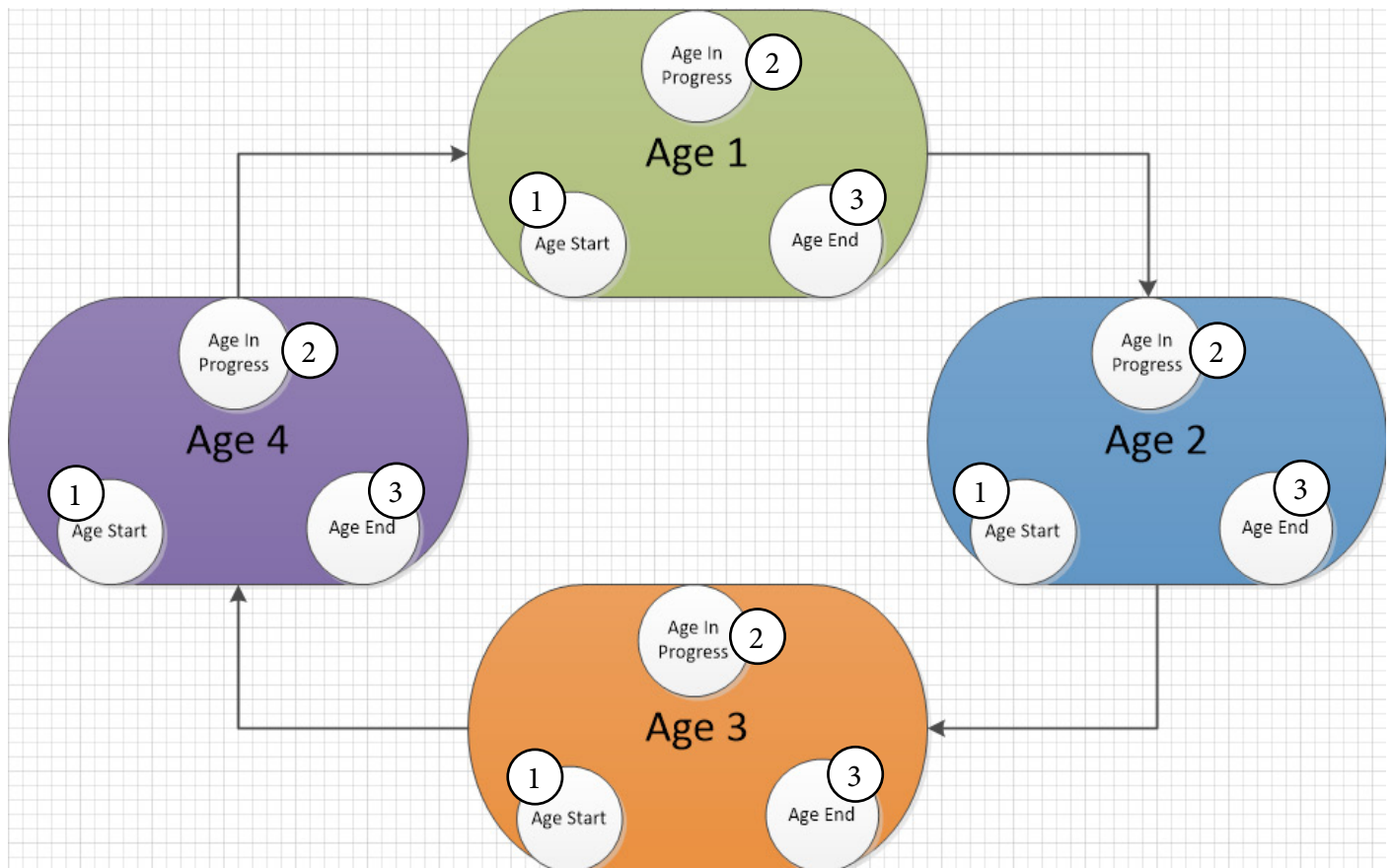


OVERALL FUNCTIONING OF THE M.E.M.E

It is an infinite loop divided into 4 segments, 1 per age.



- ① Age start and assets spawn
- ② Age timer
- ③ End of the age then move to the next age and trigger the kill of the assets present.

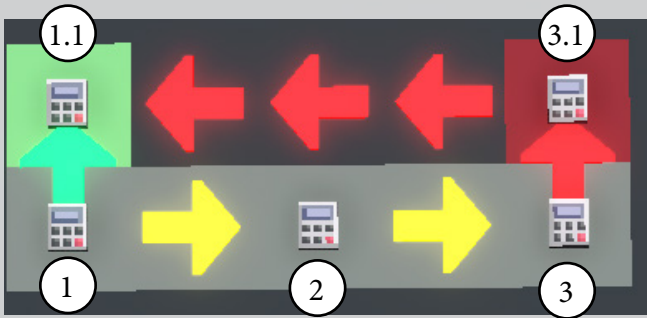


DETAILED FUNCTIONING OF THE LOOP



Loop activator.

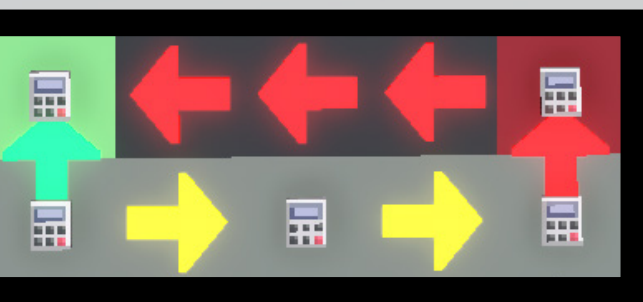
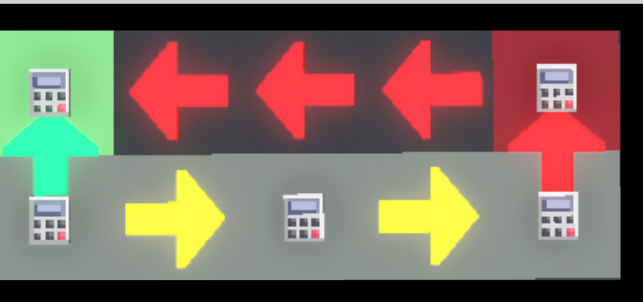
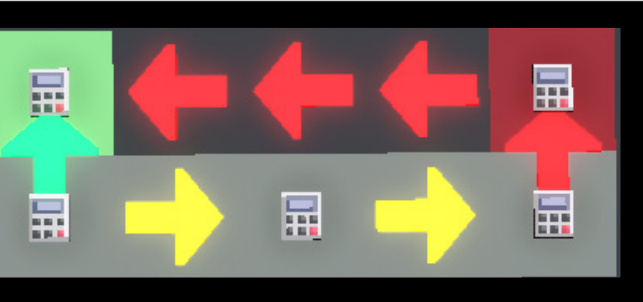
The asset sends the «Age1Start» message once at launch to start the loop.



Age Loop.

(To be repeated as many times as the desired age)

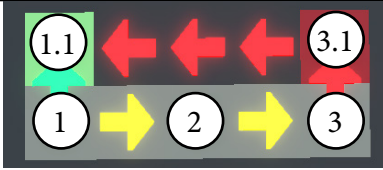
- ① Launch of the age and spawn of the assets
- ①.1 Asset spawner
- ② Age timer
- ③ End of the age then move to the next age and trigger the kill of the assets present.
- ③.1 Broadcaster that kill the assets of the age.



Next ages loop

DETAILED FUNCTIONING OF AN AGE

Age start and assets spawn



Components

1

Health ×

Health 50 🛡️

Death Event **A** Reset

Death Delay **B** -2

Instant death **C** Age1Start

Life Bar Display **D** Hidden

Invincible False True

Message sent **E** Age1InProgress

Send To Tags **F** Age1 ×

ADD +

Damaging Blocks ADD +

Blocks damage 20

Healing Blocks ADD +

Blocks heal 20

Add Component +

Tags

🔍 Age1 × **G**

A

«Death Event» = death mode of the asset.
In our case «Reset» allows the asset to respawn right after being destroyed.

B

«Death Delay» = The time it will take for the asset to die.
In our case «-2» this allows the asset to destroy itself instantly.

NB: the duration of the death animation is 0.525s

C

«Instant Death Message» = Message that allows the asset to die without receiving attack damage.
In our case «Age1Start».

D

«Life Bar Display» = Is the life bar of the asset displayed when it takes damage/strike.
In our case «Hidden» This allows not to pollute the player's UI.

E

«Message Sent On Death» = Message sent when the asset dies (Depends on the «Death Delay» parameter).
In our case «Age1InProgress» this message will trigger the death of the next asset.

F

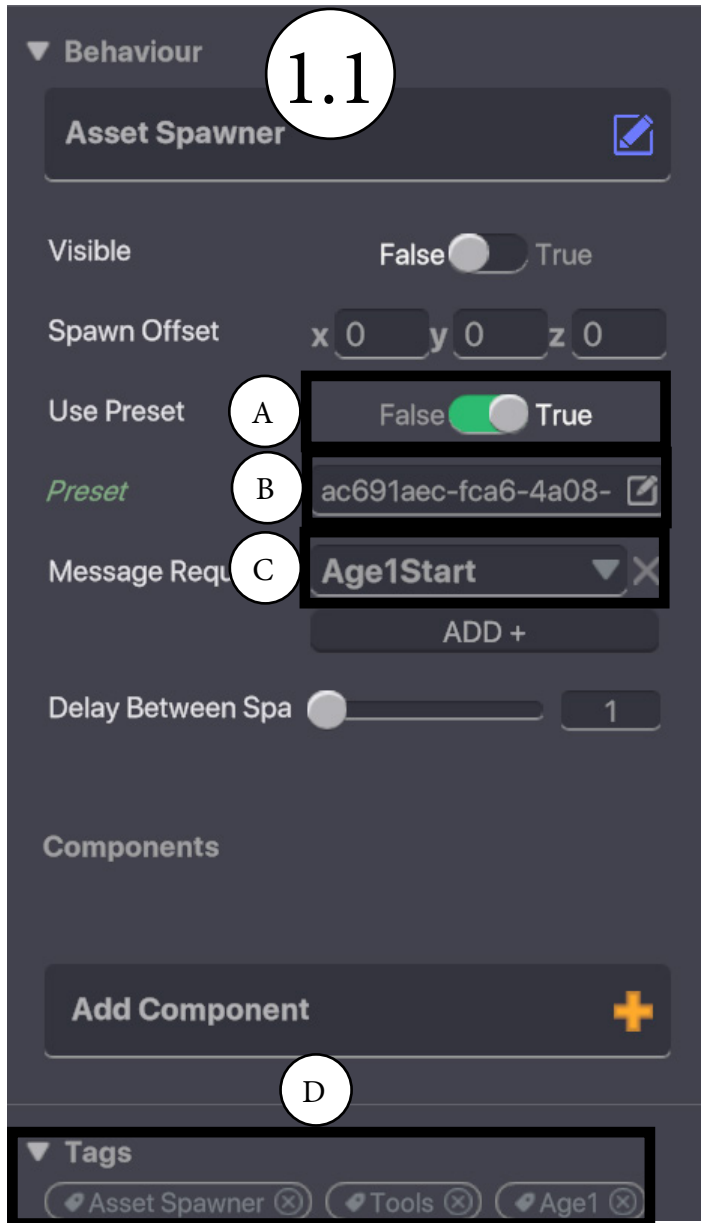
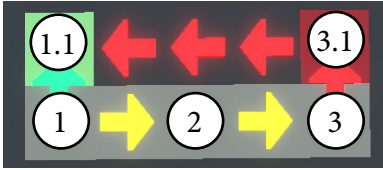
«Sent To Tag» = Target tag of the «Message Sent On Death» parameter.
In our case «Age1» the message «Age1InProgress» will be received by all assets with the tag «Age1».

G

«Tags» = Tag of the asset.
In our case «Age1» the asset will listen to all messages sent with target «Age1» or «All».

DETAILED FUNCTIONING OF AN AGE

Assets spawn



A

«Use Preset» = The spawner uses a preset.
In our case «True» it allows to spawner groups of assets and therefore to gain performance.

B

«Preset» = Preset selected in the list of available presets.
(here it's buggy but normally there is the name that you have entered in the maker)

C

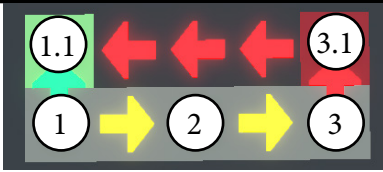
«Message Required» = Message needed to spawner our preset.
In our case the message «Age1Start» will trigger the activation of our spawner and make our preset spawning.

G

«Tags» = Tag of the asset.
In our case «Age1» the asset will listen to all the messages sent with «Age1» or «All» as target
NB: only personal tags are important

DETAILED FUNCTIONING OF AN AGE

Age timer



Components

2

Health ✕

Health 50 🛡️

Death Event **A** Reset ▼

Death Delay **B** 2

Instant death r **C** Age1InProgress ▼

Life Bar Display **D** Hidden ▼

Invincible False True

Message sent **E** Age1End ▼

Send To Tags **F** Age1 ✕

ADD +

Damaging Blocks ADD +

Blocks damage 20

Healing Blocks ADD +

Blocks heal 20

Add Component +

Tags

Age1 ✕

G

A

«Death Event» = death mode of the asset.
In our case «Reset» allows the asset to respawn right after being destroyed.

B

«Death Delay» = Time it will take the asset to die.
In our case «2» means that the asset will die after 2 seconds.

C

«Instant Death Message» = Message that allows the asset to die without receiving attack damage.
In our case «Age1InProgress».

D

«Life Bar Display» = Is the life bar of the asset displayed when it takes damage/kills.
In our case «Hidden» This allows not to pollute the player's UI.

E

«Message Sent On Death» = Message sent on the death of the asset (depends on the «Death Delay» parameter), here the message is sent after the 2 second delay.
In our case «Age1End» this message will trigger the death of the next asset.

F

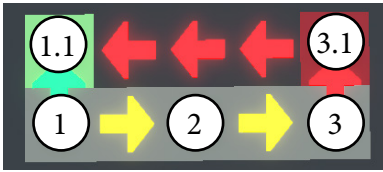
«Sent To Tag» = Target tag of the «Message Sent On Death» parameter.
In our case «Age1» the message «Age1InProgress» will be received by all assets with the tag «Age1».

G

«Tags» = Tag of the asset.
In our case «Age1» the asset will listen to all messages sent with target «Age1» or «All».

DETAILED FUNCTIONING OF AN AGE

End of the age then move to the next age and trigger the kill of the assets present.



Components

3

Health
✕

Health

50

❤️

Death Event

A
Reset

Death Delay

B
-2

Instant death r

C
Age1End

Life Bar Displa

D
Hidden

Invincible

FalseTrue

Message sent

E
Age2Start

Send To Tags

F
Age2
✕

ADD +

Damaging Blocks

ADD +

Blocks damage

20

Healing Blocks

ADD +

Blocks heal

20

Add Component
+

▼ Tags

Age1
✕

G

A

«Death Event» = death mode of the asset.
In our case «Reset» allows the asset to respawn right after being destroyed.

B

«Death Delay» = The time it will take for the asset to die.
In our case «-2» this allows the asset to destroy itself instantly.

NB: the duration of the death animation is 0.525s

C

«Instant Death Message = Message that allows the asset to die without receiving attack damage.
In our case «Age1End».

D

«Life Bar Display» = Is the life bar of the asset displayed when it takes damage/kills.
In our case «Hidden» This allows not to pollute the player's UI.

E

«Message Sent On Death» = Message sent when the asset dies.
In our case «Age2Start» this message will trigger the death of the next asset.

F

«Sent To Tag» = Target tag of the «Message Sent On Death» parameter.
In our case «Age2» the message «Age2Start» will be received by all assets with the tag «Age2».

G

«Tags» = Tag of the asset.
In our case «Age1» the asset will listen to all messages sent with target «Age1» or «All».

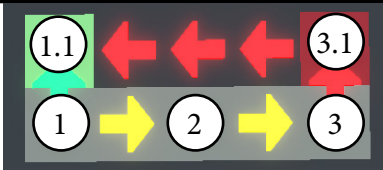
THE
SANDBOX

zeptolab

Celsius
Online

DETAILED FUNCTIONING OF AN AGE

Assets kill



Behaviour

Message Broadcaster

Visible: False ☒ True

Message to Send: **A** Kill

Broadcast Type: **B** SpecificTagsInRange

Broadcast Range: **C** 100

Tags: **D** A1

Wait Before Broadcast: **E** False ☒ True

Message Required: **F** Age1End

Broadcast Only Once: False ☐ True

Delay Between Broadcasts: 1

Components

Add Component

Tags

Message Broadcaster (X) Tools (X)

Age1 (X)

A

«Message To Send» = Message to send.
In our case «Kill» is the default message to kill an asset that has the component «Health».
In our case we can customize this message in the parameters of the assets placed in the preset.

B

«Broadcast Type» = Type of message sent.
In our case «SpecificTagsInRange» it allows to send the message to all the assets having the Tag indicated in «D» and which are carried («C»).

C

«Broadcast Range» = Broadcast range in blocks.

D

«Tags» = Target tags of the sent message.
In our case «A1» all assets that have the tag «A1» in a range of 100 blocks will receive the message «Kill».

E

«Wait Before Broadcast» = Message that triggers the sending of the message.
In our case «True» we wait for a message before sending «Kill».

F

«Message Required» = Message that we wait before sending our «Kill» message.
In our case «Age1End» so from the moment this asset will receive the «Kill» message will be sent.

G

«Tags» = Tag of the asset.
In our case «Age1» the asset will listen to all messages sent with target «Age1» or «All».

PRESETS FUNCTIONING

Presets set up

Components

Health ✕

Health 50 🛡️

Death Event **A** Destroy

Death Delay **B** -2

Instant death **C** Kill

Life Bar Display **D** Hidden

Invincible False True

Message sent **E** none

Send To Tags ADD +

Damaging Blocks ADD +

Blocks damage 20

Healing Blocks ADD +

Blocks heal 20

Add Component +

Tags **F** A1

A

«Death Event» = death mode of the asset.

In our case «Destroy» the asset does not respawn after its death.

B

«Death Delay = Time it will take for the asset to die.

In our case «-2» means that the asset will die instantly.

C

«Instant Death Message = Message that allows the asset to die without receiving attack damage.

In our case «Kill».

D

«Life Bar Display» = Is the life bar of the asset displayed when it takes damage/kills.

In our case «Hidden» This allows not to pollute the player's UI.

E

«Message Sent On Death» = Message sent on death of the asset (Depends on «Death Delay» parameter), here no message is sent on death of the asset.

F

«Tags» = Tag of the asset.

In our case «Age1» the asset will listen to all messages sent with target «Age1» or «All».

BLOCKS SPAWN

Blocks spawner set up

Behaviour

Multi

Visible: False ☒ True

Spawn Area: **A** x 1 y 1 z 1

Block to Spawn: **B** Lava

Activation Mode: **C** OnReceiveMessage

Message Required: **D** Age1Start

Components

Toggle Behaviour: X

Turn ON Message: **E** Age1Start

Turn OFF Message: **F** Age1End

Toggle Message: **G** Age4Start

Initial Behavior State: False ☒ True

Add Component: +

Tags

Age1 (X) Tools (X) Multi (X) Age4 (X)

A

«Spawn Area» = Area in which will spawn the blocks chosen here 1x1x1.

Attention the **minimal** spawn area is a cube of 3x3x3 blocks so our 1x1x1 = an area of 3x3x3 blocks

B

«Block To Spawn» = Which blocks we want to spawn.

In our case «Lava».

When the message is received, the selected spawn area will be completely filled with the selected block.

C

«Activation Mode» = How the spawner is activated.

In our case «OnReceiveMessage» We wait for a message before spawning the «Lava» block.

D

«Message Required» = Message that we wait before spawning our blocks.

In our case «Age1Start» so as soon as this asset will receive the message the blocks will spawn.

E

«Turn On Message» = Message that will turn our spawner on.

We still have to wait for the «D» message before the lava block is spawned.

F

«Turn Off Message» = Message that will turn our spawner off.

G

«Toggle Message» = Message that will switch our spawner back to active mode.

We still have to wait for the «D» message before the lava block is spawned.

H

«Tags» = Tag of the asset.

In our case «Age1» the asset will listen to all messages sent with target «Age1» or «Age4» or «All».

BLOCKS VOID

Blocks void set up

▼ Behaviour

Void

Visible False ☒ True

Destroy Area A x 1 y 1 z 1

Activation Mode B OnReceiveMessage

Message Required C Age1End

Blocks Destruction D OnlyDestroyFromList

Blocks List E Lava

ADD +

Asset Destruction DontDestroy

Components

Toggle Behaviour

Turn ON Message F Age1End

Turn OFF Message G Age2Start

Toggle Message none

Initial Behavior State False ☒ True

Add Component

▼ Tags

Age1 Tools Void Age2

A

«Destroy Area» = Area in which will be destroyed the blocks chosen here 1x1x1.

Attention the **minimal** area of void is a cube of 3x3x3 blocks so our 1x1x1 = an area of 3x3x3 blocks

B

«Activation Mode» = How the spawner is activated.

In our case «OnReceiveMessage» We wait for a message before voiding the «Lava» block.

C

«Message Required» = Message that we wait before void our blocks.

In our case «Age1End» so as soon as this asset will receive the message the blocks will void.

D

«Block Destruction» = Which blocks we want to make void

In our case «Lava».

When the message is received, the selected Destroy area will be completely emptied of the selected blocks.

E

«Blocks List» = List of blocks to destroy.

F

«Turn On Message» = Message that will turn our spawner on.

We still have to wait for the «B» message before the lava block is void.

G

«Turn Off Message» = Message that will turn our spawner off.

H

«Tags» = Tag of the asset.

In our case «Age2» the asset will listen to all messages sent with target «Age1» or «Age2» or «All».