Recap of JS

"Everything in Javascript happens hvide on "Execution Contest"

almost and an interest of the

mable Environment Exem	from Controset	Thread of execution
Memory	Code	and or it was a milest and
Key: value	I by	or hope) I have
m: \\ \m	\ line	Latori
11.6 . ()	Code ener	TIN YOUNG

(4) Januscript is a Synchronomous Single-Americal hanguage

(Synchronoms single throaded)

L> Tode vive creente One by one

Allow Cathon, the Execution Content Stone the variable and Punction with the Special rather Which is undefined for Variable.

For Most Function It will Stone Whole bady by thele manner and and whole bady by thele manner and and whole bady by thele manner and to the work of the stone whole bady by the manner and the work of the stone whole bady by the sele manner and the second of the second

Var n=2

function Square (num).

Var burs = rum *n

return burs;

Yar Square 2 = Square (n

Var Square 4 = Square

(*) It phase too, hock excente line by line. Aringing the variable to the Timen value. Cross to function we is already in Encutron Content.

(4) Next It will goes to Princhis Invocation behich creats
Seperate "Execution Context" hande the moun Execution Context". (Square (n))

Phase I

Pitty	a see 4 places		
MEMORY	Code		
n= 2 Square: \3	num! undit	ઢી	derif ?
Squeez 2: undefined		w.}	(miller)
Egune 4: unclepical	down shoot	iw p	Jed 4

Phase -II

_		
	nemony	· Code
	1, 101:2 d (1)	Memory Code
	Square: J 3	nun: 2 ans: 4
_	Square 2: 4	(i) - dhered.
**	Square 4: wdefine	ed

(*) After The "Exceut

(#) Dow H Creates that Stor

Phase ?

n: 2

Squer

i dipus

Il continue

of Store Harris

they but I would

the strong to di

al marken les

the fast Place of Warrang

The "Execution Content

(x) Another Function Involution is alled in (Square 4) If Creates Amother "Execution Context" with phase I order that Stores data and execute the Code next.

Phase I	. Solvey	Memory Co	de Jude
Memory	Code	Uneda for Sans	4
n: 2 Sq. 23	memory code		
Sque 2 : 4	hodefiel		Maye IL
Square 4: undefi	red -fried	(ve) nodono	H Core the b
plane II		ou (anna) for	just out o

Menon	CODE Miland
n: 2. 89: \{ \} Squares: 4 Square 4: 16	Nomeny Code num: 4 ans: 16 Deturn ans.

Godernent is reached, hill go bours to the branche that Stoked " Function.

be deleted.

In Smeshad,
(4) When the Program Smished.
(#) West.
Contenct " also get deleted.
The second secon
Call Stack We Js Ras its own Call Stank which used to
unich used to
COU Stoule
To fac it's own the
8 tone the Scientism Content Inside.
Succession Correction
Store the
phase I when function is invoked
-> Growthon Contage
Es Global Con
Execution >
18 history
Phase II
Sold Conference
O 1: Onl. E1
(*) Once the Ruetion and, E1
mared out and ared areas Control Execution
mace out and one
bo Global Execution Content > Execution Content
by Global Execution the Confere
200 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
bushin Towolced
(ii) When another Ruchion Involved
It my Create new Escentron Contest = = = = = = = = = = = = = = = = = = =
If my create new esternion con
I be call shock as &
and Morea to can stant
and Moved to Call Stack as E2 (GEC)
(iii) when function gets Over Ez will
(III) was june von gers over, oz
man and a day of the ballonger to
more and and Give Control to GEC Scanner with Camscanner

(x) this is know Favorscript mounage the execution contests E, untion Weation, deletion and Everything is controlled by Js. (X) After the Greention of whole program, he Call Sack will be empty on there is no Queention Contest ". 2/ to Call Stack how many names :-(1) Execution Conteset Stack (a Commonsty ported (i) Dogram Stack. (iii) (antrol Stack. ext. (60) Runtime Stack. (v) Machine Stack. 3 Hoisting (*) The variable and function are stored in memory weather before execution of the Code. undefined Not-defined (X) When we fail to mitalize When we Trutialize Value the Verlue for the Penficiler Variat. after the call function any where in the program HE U- Show lundefined grave not-defined. 4) When Execution Weatron Created It Stores Value for Valuable and fuctions.

Belause the got Harris var getrame=()=){ (x) Call Stack creentron in editor (not Infor) vara; Console. Rog (a); defined) { Console leg ("a is undefined"), Console log ("a is not undefined"); Clse ?

(24) Janscript is a loosely typed language i.e it was not attach any variables to the Speciafic datatype (x) also known as weekly typed language (hearth) undefined -> It like a placeholder which Kept burde the numable and to in the whole block of ade, that variable doorst alrigh any Variable. Exop: (depends on leavas Chinoment) (4) It means where you can always a specific Variable (Or) function in The Code furetron a () ? Van 6=10; c0) function CC) ? a(); a:5...3 Grewtron Console. Log(b) Cartent.

inly

lexical Commonment (x) Whenever the enclution Content is areated, a. E. (x) lexical environment is the local memory along in The lexical environment of its priment. leacal => Hianerly, Sequence of. G:- fuction Q() { } a() leaveally hunde the Van b=10; function cose 9-) In. c is lexically builded.
The fin. acr. (*) In that Order, the leasant Roumonment of Mul, belowse there is nothing outside GEC.

Scope chain:

(4) Nothing But the Chain of lexical environment and Pavent references.

is hold made of I discovery, it

more in a purchasion of the

let and construburabate stylled walls no vil (19)

let a = 10; Console, log(a);

Warb = 100;

Before execution the memory of a is stored in Separate memory location and b is stored in lubbar Ec because of (let & var) difference.

Tempored dead zone: - (TDZ)

Vegers to the time between when a variable is dellace thing dot or lowst and when it is initialized.

let a; ? Time Between these two is caused a=10; I temporar Dead Zone.

Stephenic in the Siet.

WIndow. b => Show Output WIndow-a=) undefined=) But let & const.

(*) Because is a " is not prosent in undoor object to 3: is alder Essention Contest!

(+) Var Con allow Multiple declaration with the Son référence.

g: vou b=10; van 6=100;

=> This works fine But when we use let "Instead

_g: det a=10; let a = 100;

shows Syntex Ornor Cause Net won't allow Same reference in the Scope. 1. 1 ZENC

2) Const => Stores in Seperate memory location lucillet But "bonst" Shows hutualize Immediate of declaration

of Preclasion the rise

Const a=100; => But if we do like let" Const a; (Shows Syndex (Type emor) Const b= 100; 28 hows enow as assignment to horn; Constant banable. 1 sheet the bures . Type error » In above lade, Const variable typing to assign rew value to b which result In Type error. Belowe -) We cannot modify or reassign value to Const variable That is why type error. (Type of b = (anst) =) (Type of b = (anst) =) to Choing Ma Type error. Heterence error Shows Regenera error Canot Consderlog (a) aues 'a' before Tritialization. Bet a=1900; In Short Const =) use when you do rearrigh another walue let =) @ let is best option on it is used separate memory and how tradded feature than Court. Var =) Old, we very considerly cause create problems le

(*) Chosures is the Combination of a function bundle bagether to the devical environment. (A) Modul mer word along the with the lexical environment (*). Cum (Feer \$) W is Called Clobures. (4) a chosuper gives alloss to the outer function 40 L Stope from the Inner function Stope. Fund furction x () { Var a = 7; function y(){ Frey Console, log (a); return y Closure. ex it six and Var Z = xc); radings begin to the Console. log (z); will set I halle in. 200%

(4) Madule Design Pattern (x) Currying (x) Functions like Once 1. grant a torne lares et) Memoize 45 maintaining State in anyone word. ON SetTimeouts. oldreif was prompted (*) Herators (x) and many more ... (3) heren videout lane Wedy American (2) **9**. Function Statement: (OV) Function Declaration The very of delearing the function is called function Hostement. 3) Moorphy functions on well (*) When you define a function infring function be has been on and It gets busted . horrs Wer ye Fin . greet () 5 an it before the Console, log ("Hello"); declaration greet ();

Linetton is a	ungred to a variable wy
P 1 h must finetion	expressions are not have
greet (); G:- Const greet = fm ();	2 Lt won't work Be
G:- Const greet = fm () ?	of its not how
Comple by ("Hello"	may beammond !
	The minted &
	Southernall .
Anonymans Renetion	and morn por
Functions (*) home without home is all	ed Anonyman In.
Function () { } Anonymous }	
(x) Ananymous Functions one use	sel when the hunting function
1 1/1 00	the may need define
· has b= fn. (){	· hather zep 11
1-211 4/1000	Ober . Il v.
b(); Here Calling the the name.	Luckin without
the hame.	, ·

of hower (*) If we give name to the hunction in an eri Beoz Interior Expression is alled namped Function Expressions. hoisted Van b = function xyz() { Console log ("b called"); : snoghand word au; bcy XYZ(); -> Shows error Belowse for xyz is Stored as Vanuable b (4) When "use value (or) variable in the function breule chon of the furtion is called powameter function School (warne, age)} Vou Stu1 = Name, age; Asquments: (x) It is the actual value. Thet you pass to t function when you call it. Cg: School (James, First Class Functions: - (or) First Class Citizens

(*) The abjlity to use functions as value,

Persong functions in function, return function thride Function.

Assigning to the variables.

Hayrail of march to some () DayX

is interest in the formation by

when I winter ! it is relieved (repeated we "not

Les state Paris, and

Arrow functions: - [Esol]

Scanned with CamScanner

interes falls i william.