

## BlockWord Charter

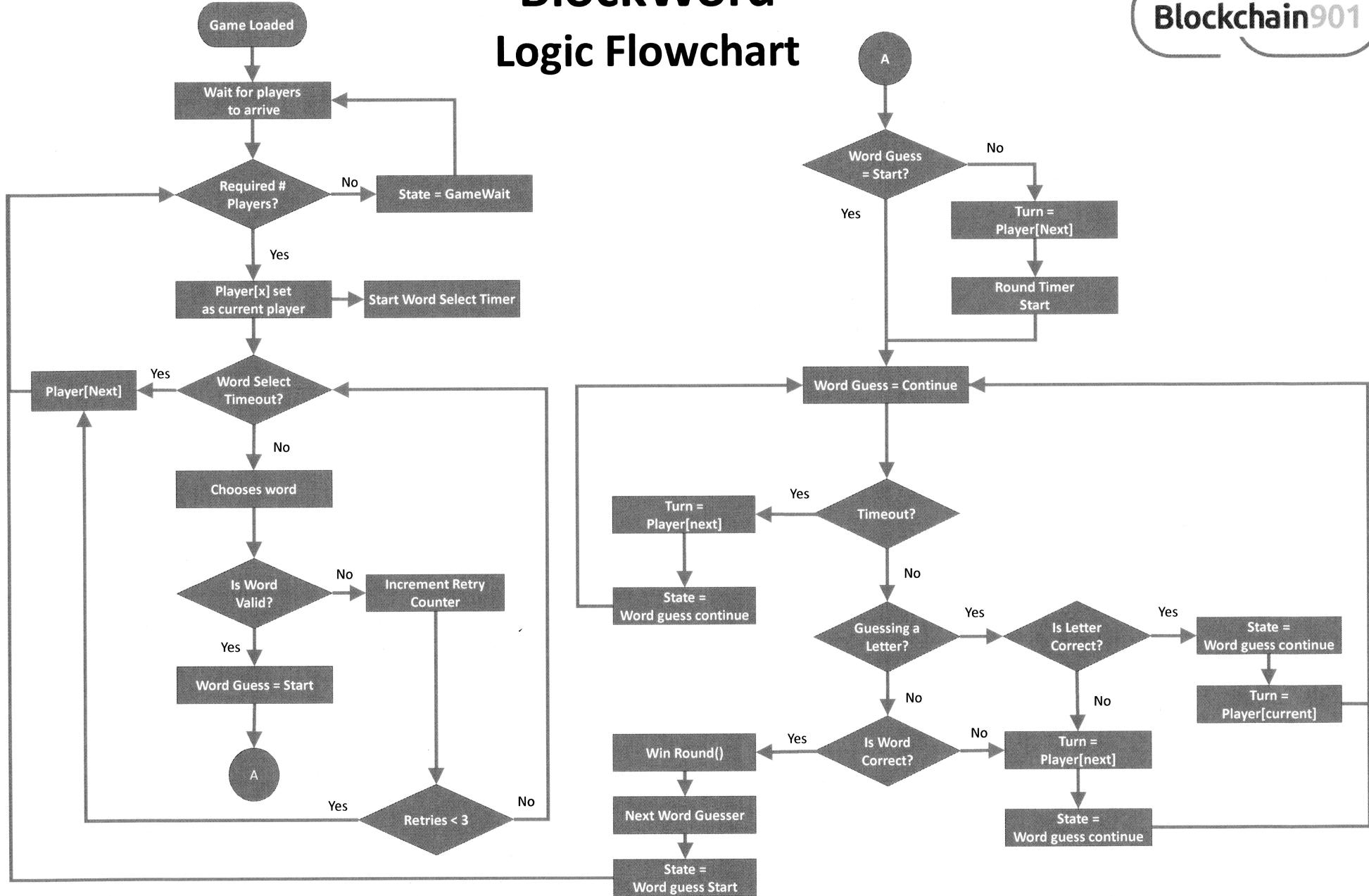
<b>PURPOSE</b>	
	<ul style="list-style-type: none"> <li>• Multiplayer word game on a blockchain</li> </ul>
<b>GOAL</b>	
	<ul style="list-style-type: none"> <li>• Learn blockchain development               <ul style="list-style-type: none"> <li>• Web 3.0 dApps</li> <li>• Architecture</li> <li>• Design</li> <li>• Software Development Lifecycle Game Theory</li> </ul> </li> </ul>
<b>SCOPE</b>	
In Scope	<ul style="list-style-type: none"> <li>• Works in a web browser</li> <li>• Multiplayer</li> <li>• Gives rewards</li> <li>• Puzzle-like UI</li> <li>• English only</li> </ul>
Out of Scope	<ul style="list-style-type: none"> <li>• Wagers</li> <li>• AI players</li> <li>• Game theory extras</li> <li>• Randomizer</li> </ul>
<b>STAKEHOLDERS</b>	
	<ul style="list-style-type: none"> <li>• Blockchain901 Team</li> <li>• UMRF Research Park</li> <li>• Blockchain network</li> </ul>
<b>TEAM</b>	
<b>TIMELINE</b>	

Some *Project Charter* resources:

- <https://www.tbs-sct.gc.ca/emf-cag/project-projet/documentation-documentation/guide-guide/guide-guide-eng.pdf>
- <https://blog.masterofproject.com/six-sigma-project-charter/>
- <https://project-management.com/components-of-a-project-charter/>

# “BlockWord” Logic Flowchart

Blockchain901



Ver.	Date	Notes
0.1	2019/10/22	Original Version

## BlockWord Rules

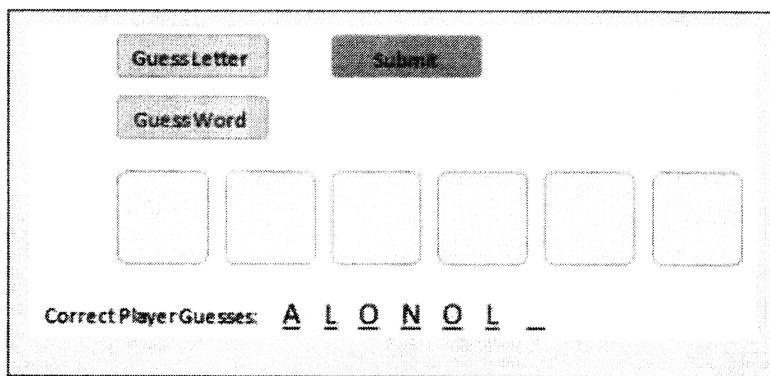
<b>RULES OF GAME</b>	
1.	Each letter guess displays exactly 1 letter in the solution
2.	Each correct letter guessed is displayed for ALL users, in the order guessed
3.	Guesser must correctly guess word to win and get bonus
4.	Incorrect guesses are not displayed
5.	Users take turn
6.	Turn timeout = 10 sec → change turn      GUESS TIMER SECS      GUESSTURN
7.	Correct letter guess = extra turn
8.	Total round timeout = 5 min      ROUND TIMER SECS
9.	Minimum and maximum word length
10.	Minimum number of players
11.	Word selector timeout
12.	After minimum # click JOIN, active play, select word
13.	Joiner #1 becomes selector and chooses word
14.	Next round, Joiner #2 becomes the selector and selects word
15.	Selector receives reward for selection: If stumps = full, else less reward. No reward if no word selected.
16.	Re-use Word Test: identifies if word was recently used (need to define requirements)
17.	Word Select Timer = 10 seconds

18. SELECTOR - WORD SELECT RETRY COUNT IS 3

## GAME EXAMPLE

Chosen Word = BALLOON

Mock Up Game Display



## PARKING LOT

- How to start game
- Auto, manual, triggered
- Number of players (max/min)
- More than 1 game running?

Persona	Activities	Stories	Events
Word Selector	Select a word	1. Choose word 2. Enter word 3. Submit	
Guesser	Guess a letter	1. Decide guess 2. Type guess 3. Submit	
	Guess a word	1. Decide guess 2. Type guess 3. Submit	
Rule Enforcer	Check each guess	If entry is 1 letter	Compare <i>letter</i> to letters in word If correct: <ul style="list-style-type: none"><li>• send correct letter to Vanna</li><li>• change turner</li><li>• reset</li></ul> If incorrect: <ul style="list-style-type: none"><li>• send bad news to Vanna</li><li>• change turn to next guesser</li></ul>
		If entry is word (> 1 letter)	Compare <i>word</i> entered to selected word If match: <ul style="list-style-type: none"><li>• Round over – WIN</li><li>• Send good news to Vanna</li></ul> If not match: <ul style="list-style-type: none"><li>• Change turn</li><li>• Send bad news to Vanna</li></ul>
	Validate word selection	Ensure selected word is: <ul style="list-style-type: none"><li>• spelled correctly</li><li>• English language</li><li>• &gt;= minimum</li><li>• &lt;= maximum</li></ul>	

Continued ↓

Persona	Activities	Stories	Events
Rule Enforcer <i>(continued)</i>	Give rewards/ penalties	If round winner Give tokens to winner Give selector tokens If game expires Reward selector	
	Keep score		
	Change turn	If correct letter Reset turn Else Change to next guesser	
	Start game	Wait for minimum joiners	
	Deliver news to Vanna		
	Keeps track of round	When round is over Give rewards Start new round	
	Keep time	If turn time expires: <ul style="list-style-type: none"><li>• Tell Vanna</li><li>• Change turn</li></ul> If game time expires <ul style="list-style-type: none"><li>• Tell Vanna</li><li>• Round over</li></ul> If word time expires <ul style="list-style-type: none"><li>• Tell Vanna</li><li>• Change Turn to next player</li></ul>	
Vanna	Display news		
	Display scores		
	Receive guesses	Display guess box Show turn to current player	