1.0 User Interface

The user interface shall be a website that is clean, easy to navigate and intuitive in use. The website contain the ability to parse a document in order to enable the Slash, Slash Playback, and COLR modules. The website will be setup as a single page application and interact with node.js and the database.

ITF	Title	Description	Verification	Ref
1.1	Shell			
1.1.1	HTML	System shall display content by: • Displaying content table • Displaying website navigation bar • Displaying website design background as well as CLASH logo		Fizz
1.1.2	Javascript	System shall perform a particular task put it inside a script element anywhere inside an HTML document or with a .js extension.		Ali
1.1.3	Input document	System shall accept text via pasting document into text box.	Test keyboard shortcut and mouse click.	
1.1.4	Save document	System shall be able to save a parsed document after all edits have been made.	Save documents and check database to ensure they were saved by the system	
1.1.5	Retrieve document	System shall be able to retrieve a previously parsed/edited document.	Retrieve documents and check them to ensure they are displayed correctly.	

ITF	Title	Description	Verification	Ref
1.2	Slash Module	System shall call 'SLASH' algorithm	Test system call	Glossary ref. to 'SLASH'
1.2.1	Slash Document	System will send call to 'SLASH' an input document (ITF 1.1.3). Document will be parsed into lexical bundles following pre-approved 'SLASH' logic. • Slash after each period, comma, semicolon, colon, or question mark • Slash before each preposition • Slash before each conjunction	Compare document 'SLASHED' by system to that of document manually slashed by professor. **Need to set a success threshold**	Glossary ref. to 'lexical bundles' Ming
1.2.1.1	Exception List	The system shall compare 'SLASHED' text with list of 'exceptions' to ensure the algorithm will not break bundles on said exception list.		Ming
1.2.2	Display 'Slashed' Document			
1.2.3	Slash Edit	System shall allow for the ability to right click in order to either: • Remove a slash that was placed incorrectly.	Slashes will be removed and added at random to a document to test functionality.	

		• Add a slash where one is required but not placed by the 'SLASH' algorithm.		

ITF	Title	Description	Verification	Ref
1.3	Slash Playback	System shall allow for 'SLASH PLAY' button to be pressed so that previously 'SLASHED' document will be displayed in a speed reader type format.	Play previously 'SLASHED' document back ensuring that thought groups appear in order, with appropriate breaks.	
1.3.1	Squirt.io IN			
1.3.2	Squirt.io OUT			
1.3.3	Slash Playback	System shall allow the user to input two commands for Slash Playback: • Play button – Feedback which provides a display of the text in lexical bundles at the chosen speed. • Pause button – Feedback which halts the display of		Andrew

		lexical bundles.		
1.3.4	Slash Playback Variable Speed	System shall allow for the slowdown and speed up 'SLASH PLAY' as desired to certain word per minutes thresholds.	Test at variable speeds and ensure that words per minute are approximately correct.	

ITF	Title	Description	Verification	Ref
1.4	COLR Module	System shall allow for an input document (ITF 1.1.3) which it will then relay to P.O.S. parser used for the COLR module.		Glossary ref. to COLR James
1.4.1	COLR Document	System will send call to 'COLR' an input document (ITF 1.1.3). Document will be parsed using pre-approved 'COLR' logic.		
1.4.1	COLR Display	System shall displaying the document with each part of speech (P.O.S.) of each particular word, grouped by color.	Compare document 'COLR'd' by system to that of document manually slashed by professor. **Need to set a success threshold**	Glossary ref. to P.O.S.
1.4.1.1	Part of Speech	System shall allow for singular, or multiple parts of speech to be toggled so as to turn all other parts of speech black. (Ex. If noun is selected, all nouns will stay colored, and other parts of	Test each part of speech to ensure that no others are shown.	

		speech will be black.) Parts of Speech: • Noun • Pronoun • Verb • Adjective • Adverb • Preposition • Conjunction • Interjection		
1.4.2	COLR Edit	System shall allow for text to be right clicked and label for part of speech assigned to be changed. Drop down menu will allow access to a list of parts of speech to change the assignment/color of a particular word.	Words will randomly be chosen to have their assignment changed. All parts of speech should be changed at some point to all other parts of speech to ensure full functionality.	

2.0 Node.js

Node.js shall provide <insert text>

ITF	Title	Description	Verification	Ref
2.1	Setup node.js			
2.1.1	Install NPM modules	Install: • Jquery • Morgan • Express • MySQL API • Python/shell		James
2.1.2	Configure server for continuous run	The system shall provide synchronous communication between the client and server so that client page does not		Erich

		need to refresh to view changes in the client state.		
2.1.2.1	Javascript code for node			
2.1.2.2	Linux scripts to launch as daemon			

ITF	Title	Description	Verification	Ref
2.2	NGNIX Server			
2.2.1	File reconfiguration			

ITF	Title	Description	Verification	Ref
2.3	Node/database			

ITF	Title	Description	Verification	Ref
2.4	Parse text			
2.4.1	NLTK			
2.4.1.1	Translate NLTK			
2.4.1.2	JSON			

3.0 Database

The database shall provide <insert text>

ITF	Title	Description	Verification	Ref
3.1	Document Handling			
3.1.1	Document Storage and Retrieval	This function shall provide the user to store recently parsed documents and to retrieve previously stored documents.		Justin
3.1.1.1	Retrieve All	This function shall retrieve all documents available to be read		

		based on permissions.		
3.1.1.2	Retrieve Document	This function shall retrieve a document to be displayed by the User Interface.		

ITF	Title	Description	Verification	Ref
3.2	User Roles			
3.2.1	User Authentication	This function shall provide the ability of account creation, management, account login, and password management.		Justin
3.2.1.1	User	The system shall allow for user level access.		Justin
3.2.1.1.1	Login	The systems shall allow user to login to the system using a user name and password.		Justin
3.2.1.1.2	Create PW	The system shall allow the user to create a new password on first login.		Justin
3.2.1.1.3	Create PW – Post Admin Reset	The system shall allow the user to create a new password after a reset by the administrator.		Justin
3.2.1.2	System Administrator	The system shall allow for system administrator access.		Justin
3.2.1.2.1	Create Accounts	The systems hall allow system administrator to create user accounts, including login name,		Justin

		password, and appropriate roles and permissions.		
3.2.1.2.2	Activate/Deactivate	The system shall allow system administrator to activate and deactivate user accounts.		Justin
3.2.1.2.3	Password Req.'s	The system shall allow the system administrator to set regular password reset requirements.		Justin
3.2.1.2.4	Password Creation Rules	The system shall allow the system administrator to create rules/guidelines for password creation.		Justin
3.3	Class roles			
3.3.1	Class Authentication	This function shall provide the ability class creation, management, login, and password, CRN.		Mohammed
3.3.2	Crate class	The systems shall allow system administrator\ instructor to create new class, including login name, password, class type, and permissions.		Mohammed
3.3.3	Activate/Deactivate	The system shall allow system administrator\ instructor to		Mohammed

		activate and deactivate		