CLASSES	STATUS	TIME	PASSED/TOTAL	REPORT
SentenceStructureInfoTest	**PASSED**	**TOTAL: 33 ms**	**15/15**	
Test basic constructor initialization	PASSED	14 ms		
Test empty Template	PASSED	3 ms		
Test Template with no placeholders	PASSED	<1 ms		
Test template with single placeholder type	PASSED	1ms		
Test template with multiple placeholder types	PASSED	1ms		
Test template with repeated placeholders	PASSED	1ms		
Test template with mixed content	PASSED	1ms		
Test getCount for non-existent types	PASSED	<1 ms		
Test template with special characters and spacing	PASSED	<1 ms		
Test template with punctuation	PASSED	<1 ms		
Test getAllCounts map properties	PASSED	4ms		
Test template consistency and immutability	PASSED	1ms		
Test edge cases and boundary conditions	PASSED	1ms		
Test WordUtil.TypeCheck integration	PASSED	1ms		
Test performance with large templates	PASSED	5ms		
SentenceStructureTest	**PASSED**	**TOTAL: 95 ms**	**14/14**	
Test basic constructor and initialization	PASSED	35ms		
Test loading with empty file	PASSED	4ms		
Test loading with single line file	PASSED	5ms		
Test loading with multiple lines	PASSED	3ms		
Test loading with blank lines	PASSED	2ms		
Test loading with special characters	PASSED	4ms		
Test getStructures method properties	PASSED	3ms		
Test file loading robustness	PASSED	4ms		
Test loading with different line endings	PASSED	2ms		
Test memory efficiency and performance	PASSED	21ms		
Test WordUtil integration behavior	PASSED	2ms		
Test structure content validation	PASSED	2ms		
Test data integrity and immutability	PASSED	5ms		
Test integration with WordUtil	PASSED	3ms		
WordListTest	**PASSED**	**TOTAL: 89 ms**	**16/16**	
Test WordList constructor with valid file	PASSED	28 ms		
Test WordList constructor with empty file	PASSED	3 ms		
Test WordList constructor with file containing blank lines	PASSED	2 ms		
Test WordList constructor with single word file	PASSED	3 ms		
Test WordList constructor behavior documentation	PASSED	1 ms		
Test Random method with populated list	PASSED	5 ms		
Test Random method with empty list	PASSED	6 ms		
Test Random method with single word	PASSED	1 ms		
Test Random method distribution	PASSED	14 ms		
Test WordList with large file	PASSED	13 ms		
Test WordList inheritance structure	PASSED	2 ms		
Test protected fields access	PASSED	2 ms		

REPORT column contents:

SentenceStructureInfoTest (org.example.SentenceStructures) — 33 ms
- Test basic constructor initialization — 14 ms
- Test empty template — 3 ms
- Test template with no placeholders
- Test template with single placeholder type — 1ms
- Test template with multiple placeholder types — 1ms
- Test template with repeated placeholders — 1ms
- Test template with mixed content — 1ms
- Test getCount for non-existent types
- Test template with special characters and spacing
- Test template with punctuation
- Test getAllCounts map properties — 4ms
- Test template consistency and immutability — 1ms
- Test edge cases and boundary conditions — 1ms
- Test WordUtil.TypeCheck integration — 1ms
- Test performance with large templates — 5ms

SentenceStructuresTest (org.example.SentenceStructures) — 95 ms
- Test basic constructor and initialization — 35 ms
- Test loading with empty file — 4 ms
- Test loading with single line file — 5 ms
- Test loading with multiple lines — 3 ms
- Test loading with blank lines — 2 ms
- Test loading with special characters — 4 ms
- Test getStructures method properties — 3 ms
- Test file loading robustness — 4 ms
- Test loading with different line endings — 2 ms
- Test memory efficiency and performance — 21 ms
- Test WordUtil integration behavior — 2 ms
- Test structure content validation — 2 ms
- Test data integrity and immutability — 5 ms
- Test integration with WordUtil — 3 ms

WordListTest (org.example.words) — 89 ms
- Test WordList constructor with valid file — 28 ms
- Test WordList constructor with empty file — 3 ms
- Test WordList constructor with file containing blank lines — 2 ms
- Test WordList constructor with single word file — 3 ms
- Test WordList constructor behavior documentation — 1ms
- Test Random method with populated list — 5 ms
- Test Random method with empty list — 6 ms
- Test Random method with single word — 1ms
- Test Random method distribution — 14 ms
- Test WordList with large file — 13 ms
- Test WordList inheritance structure — 2 ms
- Test protected fields access — 2 ms

Test	Status	Time	Count	
Test WordList with special characters	PASSED	2 ms		
Test WordList error resilience	PASSED	3 ms		
Test WordList state consistency	PASSED	2 ms		
Test WordList abstract class behavior	PASSED	2 ms		
WordUtilTest	**PASSED**	**TOTAL: 21 ms**	**4/4**	
testTypeSubstituteReplacesPlaceholder()	PASSED	13 ms		
testTypeCheckReturnsNullForNoBrackets()	PASSED	2 ms		
testTypeCheckDetectsType()	PASSED	4 ms		
testRandomizerWithinBounds()	PASSED	2 ms		
AppTest	**PASSED**	**TOTAL: 30 sec 856 ms**	**15/15**	
Test App initialization	PASSED	21 ms		
Test SentenceResult class	PASSED	3 ms		
Test null input validation	PASSED	3 ms		
Test empty input validation	PASSED	1 ms		
Test whitespace-only input validation	PASSED	2 ms		
Test input without letters validation	PASSED	2 ms		
Test valid simple input	PASSED	3 sec 608 ms		
Test longer input sentence	PASSED	2 sec 239 ms		
Test input with punctuation	PASSED	1 sec 794 ms		
Test various input types	PASSED	9 sec 277 ms		
Test toxicity range validation	PASSED	2 sec 650 ms		
Test result consistency	PASSED	2 sec 752 ms		
Test performance with reasonable timeout	PASSED	1 sec 750 ms		
Test result structure completeness	PASSED	1 sec 227 ms		
Test edge cases	PASSED	5 sec 526 ms		
GoogleCredentialsProviderTest	**PASSED**	**TOTAL: 136 ms**	**12/12**	
Test missing credentials file	PASSED	14 ms		
Test invalid JSON credentials file	PASSED	38 ms		
Test empty credentials file	PASSED	2 ms		
Test credentials file with invalid structure	PASSED	2 ms		
Test credentials file with mock service account structure	PASSED	9 ms		
Test provider caching mechanism	PASSED	53 ms		
Test credentials file path resolution	PASSED	4 ms		
Test static provider field access	PASSED	1 ms		
Test credentials file permissions	PASSED	3 ms		
Test concurrent access to provider	PASSED	7 ms		
Test error handling and cleanup	PASSED	2 ms		
Test class constants and structure	PASSED	1 ms		
UITest	**PASSED**	**TOTAL: 524 ms**	**12/12**	
Test UI application initialization	PASSED	13 ms		
Test stage creation and properties	PASSED	88 ms		
Test scene creation and attachment	PASSED	188 ms		
Test FXML resource loading	PASSED	2 ms		

WordUtilTest (org.example.words) — 21 ms
- testTypeSubstituteReplacesPlaceholder() — 13 ms
- testTypeCheckReturnsNullForNoBrackets() — 2 ms
- testTypeCheckDetectsType() — 4 ms
- testRandomizerWithinBounds() — 2 ms

AppTest (org.example) — 30 sec 856 ms
- Test App initialization — 21 ms
- Test SentenceResult class — 3 ms
- Test null input validation — 3 ms
- Test empty input validation — 1 ms
- Test whitespace-only input validation — 2 ms
- Test input without letters validation — 2 ms
- Test valid simple input — 3 sec 608 ms
- Test longer input sentence — 2 sec 239 ms
- Test input with punctuation — 1 sec 794 ms
- Test various input types — 9 sec 277 ms
- Test toxicity range validation — 2 sec 650 ms
- Test result consistency — 2 sec 753 ms
- Test performance with reasonable timeout — 1 sec 750 ms
- Test result structure completeness — 1 sec 227 ms
- Test edge cases — 5 sec 526 ms

GoogleCredentialsProviderTest (org.example) — 136 ms
- Test missing credentials file — 14 ms
- Test invalid JSON credentials file — 38 ms
- Test empty credentials file — 2 ms
- Test credentials file with invalid structure — 2 ms
- Test credentials file with mock service account structure — 9 ms
- Test provider caching mechanism — 53 ms
- Test credentials file path resolution — 4 ms
- Test static provider field access — 1 ms
- Test credentials file permissions — 3 ms
- Test concurrent access to provider — 7 ms
- Test error handling and cleanup — 2 ms
- Test class constants and structure — 1 ms

UITest (org.example) — 524 ms
- Test UI application initialization — 13 ms
- Test stage creation and properties — 88 ms
- Test scene creation and attachment — 188 ms

Test CSS stylesheet loading	PASSED	4 ms		
Test logo image resource loading	PASSED	58 ms		
Test application resource paths	PASSED	1 ms		
Test UI start method error handling	PASSED	150 ms		
Test stage properties and behavior	PASSED	16 ms		
Test scene properties and structure	PASSED	1 ms		
Test application lifecycle	PASSED	1 ms		
Test resource accessibility patterns	PASSED	2 ms		
MainControllerTest	**PASSED**	**TOTAL: 9 sec 161 ms**	**6/6**	
Test UI Initialization	PASSED	106 ms		
Test empty input	PASSED	17 ms		
Test generation with valid input	PASSED	5 sec 15 ms		
Test toggle syntax tree visibility	PASSED	8 ms		
Test generation with special characters	PASSED	4 sec 12 ms		
Test controller availability	PASSED	3 ms		

✓ Test FXML resource loading — 2 ms
✓ Test CSS stylesheet loading — 4 ms
✓ Test logo image resource loading — 58 ms
✓ Test application resource paths — 1 ms
✓ Test UI start method error handling — 150 ms
✓ Test stage properties and behavior — 16 ms
✓ Test scene properties and structure — 1 ms
✓ Test application lifecycle — 1 ms
✓ Test resource accessibility patterns — 2 ms

✓ MainControllerTest (org.example.controller) — 9 sec 161 ms
✓ Test UI Initialization — 106 ms
✓ Test empty input — 17 ms
✓ Test generation with valid input — 5 sec 15 ms
✓ Test toggle syntax tree visibility — 8 ms
✓ Test generation with special characters — 4 sec 12 ms
✓ Test controller availability — 3 ms