Software Verification

Static Analysis Report

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01 CheckStyle



Fecs-CabinsController

fecs - File CabinsController.java

Summary

otal	High Priority		Normal Priority	Low Priority	
4	34		0	0	
etails					
Categories Types	Narnings Details				
Туре		Total	Distribution		
AvoidInlineConditionals	<u>Check</u>	3			
FinalParametersCheck		3			
HideUtilityClassConstruc	torCheck	1			
<u>JavadocMethodCheck</u>		1			
<u>JavadocPackageCheck</u>		1	-		
LineLengthCheck		17			
LocalVariableNameChec	k	2			
NeedBracesCheck		2			
UnusedImportsCheck		1.7			
WhitespaceAroundChec	₹ .	3			
Total		34			

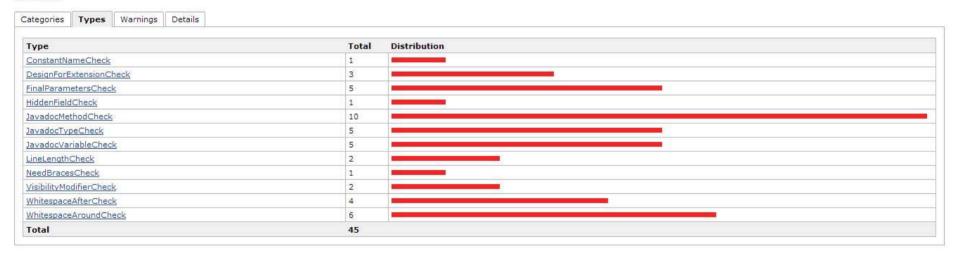
* File, Type을 기준으로 나누되 Type 결과가 없는 것은 Warning으로 표시하였음

Fecs-Circumstance

fecs - File Circumstance.java

Summary

Total	High Priority	Normal Priority	Low Priority
45	45	0	0

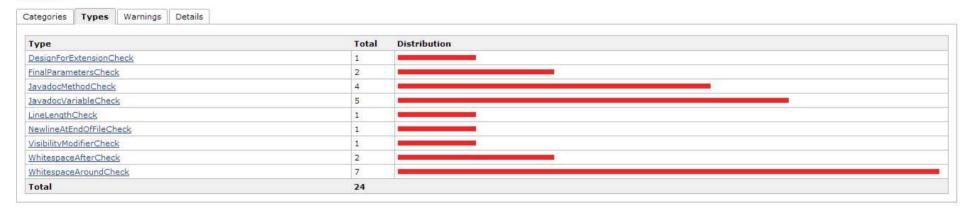


Fecs-Fecs

fecs - File Fecs.java

Summary

Total	High Priority	Normal Priority	Low Priority
24	24	0	0



Fecs-FloorSet

Checkstyle Warnings - File FloorSet.java

Summary

Total	High Priority	Normal Priority	Low Priority
4	4	0	0

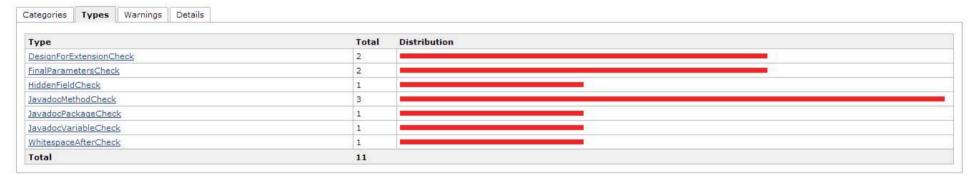
File	Line	Priority	Туре	Category
FloorSet.java:20	20	High	LineLengthCheck	Sizes
FloorSet.java:43	43	High	LineLengthCheck	Sizes
FloorSet.java:59	59	High	LineLengthCheck	Sizes
FloorSet.java:68	68	High	LineLengthCheck	Sizes

[Fecs.event-ElevatorCall]

Checkstyle Warnings - File ElevatorCall.java

Summary

Total	High Priority	Normal Priority	Low Priority
11	11	0	0

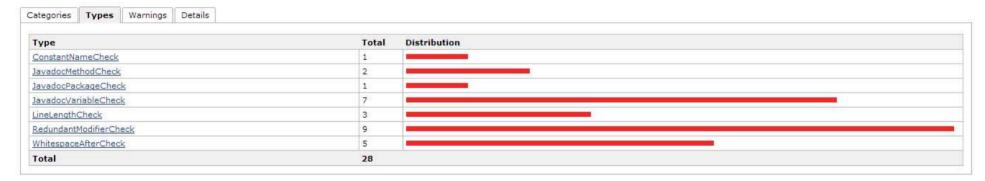


Fecs.interfaces-ICircumstance

Checkstyle Warnings - File ICircumstance.java

Summary

Total	High Priority	Normal Priority	Low Priority
28	28	0	0



Fecs.interfaces-IPassengerMaker

Checkstyle Warnings - File IPassengerMaker.java

Summary

Total	High Priority	Normal Priority	Low Priority
7	Z	0	0

File	Line	Priority	Туре	Category
IPassengerMaker.java:8	8	High	JavadocMethodCheck	Javadoc
IPassengerMaker.java:10	10	High	JavadocMethodCheck	Javadoc
IPassengerMaker.java:12	12	High	JavadocMethodCheck	Javadoc
IPassengerMaker.java;14	14	High	JavadocMethodCheck	Javadoc
IPassengerMaker.java:16	16	High	JavadocMethodCheck	Javadoc
IPassengerMaker.java:18	18	High	JavadocMethodCheck	Javadoc
PassengerMaker.java:20	20	High	JavadocMethodCheck	Javadoc

[Fecs.model-CabinType]

Checkstyle Warnings - File CabinType.java

Summary

Total	High Priority	Normal Priority	Low Priority
3	3	0	0

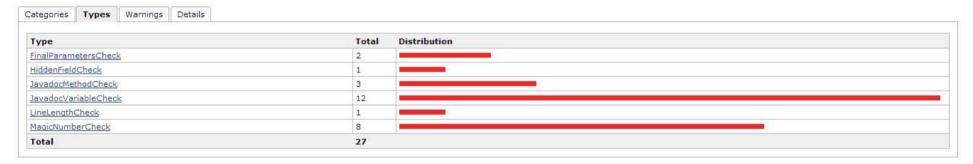
Туре	Total Distribution	
JavadocPackageCheck	1	
JavadocVariableCheck	2	

Fecs.model-FloorType

Checkstyle Warnings - File FloorType.java

Summary

Total	High Priority	Normal Priority	Low Priority	
27	27	0	0	

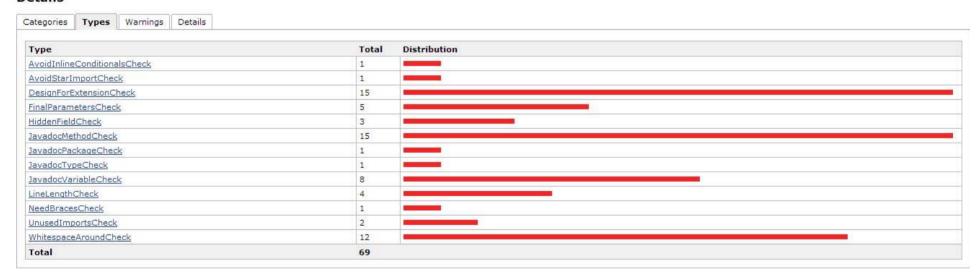


Fecs.simulation-Cabin

Checkstyle Warnings - File Cabin.java

Summary

Total	High Priority	Normal Priority	Low Priority
69	69	0	0

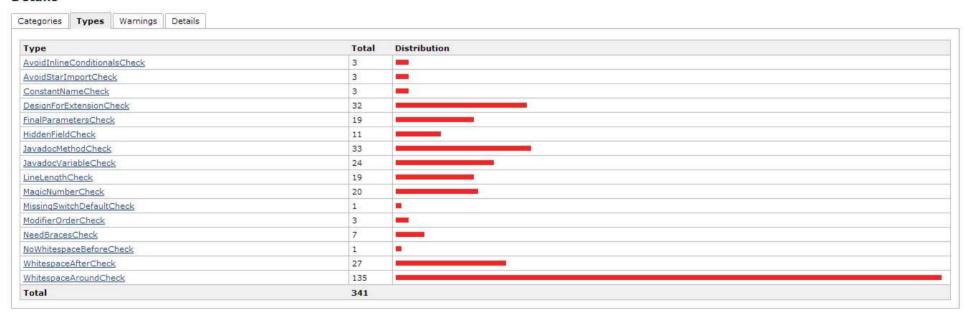


[Fecs.simulation-Engine]

Checkstyle Warnings - File Engine.java

Summary

Total	High Priority	Normal Priority	Low Priority
341	<u>341</u>	0	0

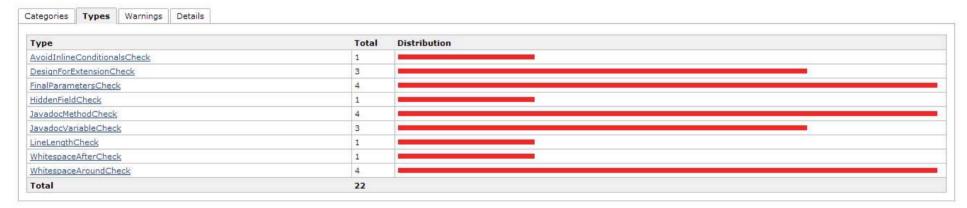


Fecs.simulation-Floor

Checkstyle Warnings - File Floor.java

Summary

Total	High Priority	Normal Priority	Low Priority
22	22	0	0

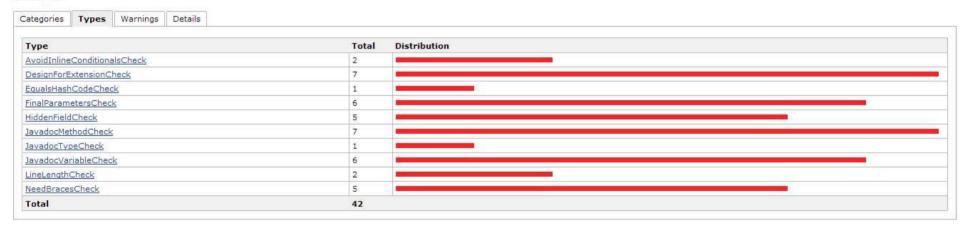


[Fecs.simulation-Passenger]

Checkstyle Warnings - File Passenger.java

Summary

Total	High Priority	Normal Priority	Low Priority
42	42	0	0

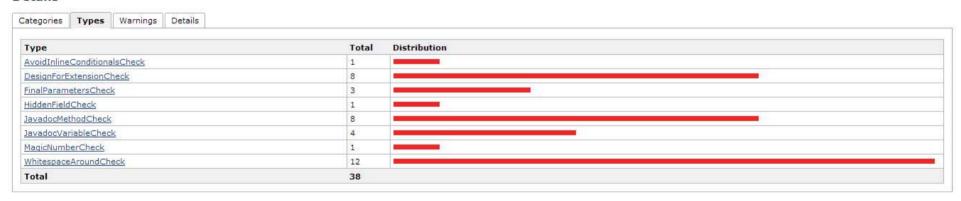


Fecs.simulation-PassengerMaker

Checkstyle Warnings - File PassengerMaker.java

Summary

Total	High Priority	Normal Priority	Low Priority
38	38	0	0

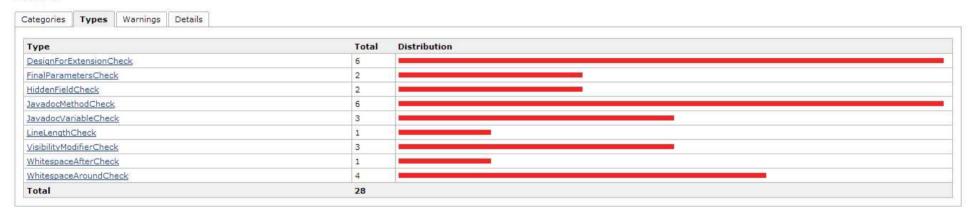


Fecs.simulation-Place

Checkstyle Warnings - File Place.java

Summary

Total	High Priority	Normal Priority	Low Priority
28	28	0	0

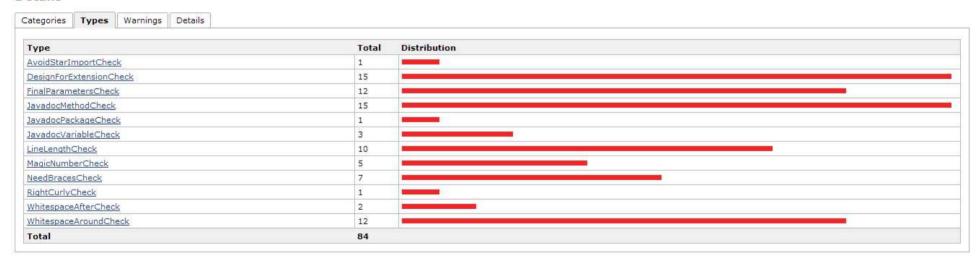


Fecs.ui-Controller

Checkstyle Warnings - File Controller.java

Summary

Total	High Priority	Normal Priority	Low Priority
84	84	0	0

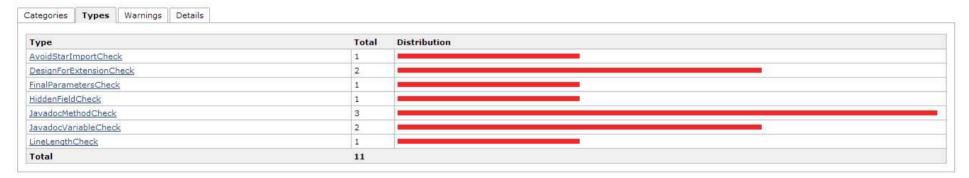


Fecs.ui-Renderer

Checkstyle Warnings - File Renderer.java

Summary

Total	High Priority	Normal Priority	Low Priority
11	11	0	0



Overall results - Categories

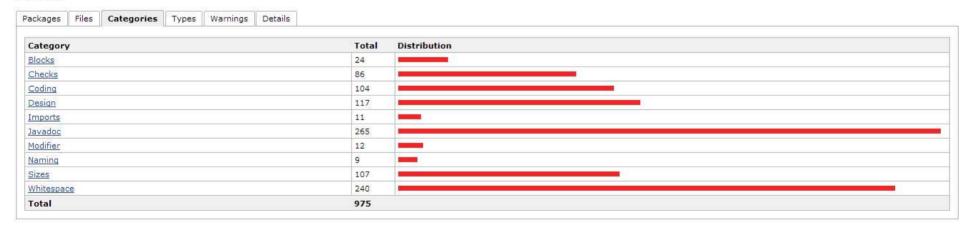
CheckStyle Result

Warnings Trend

All Warnings	New Warnings	Fixed Warnings
975	0	0

Summary

Total	High Priority	Normal Priority	Low Priority
975	975	0	0



Overall results - Files

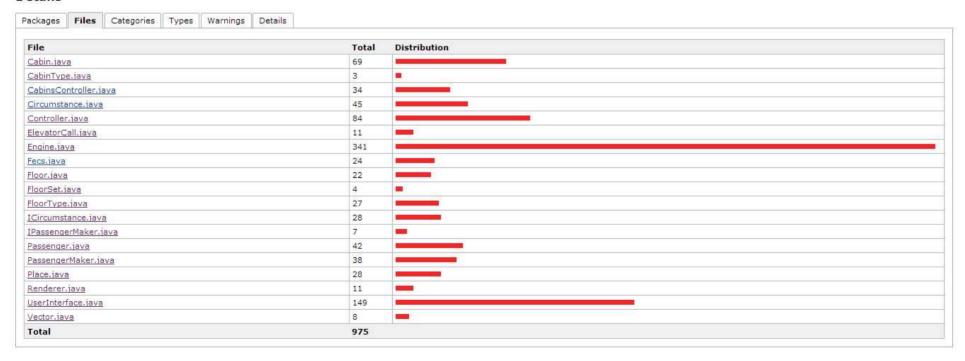
CheckStyle Result

Warnings Trend

All Warnings	New Warnings	Fixed Warnings
975	0	0

Summary

Total	High Priority	Normal Priority	Low Priority
975	975	0	0



Overall results - Types

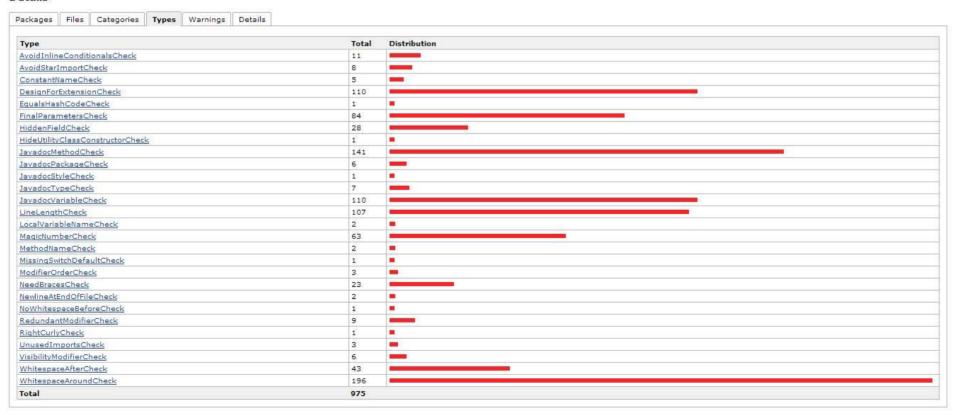
CheckStyle Result

Warnings Trend

All Warnings	New Warnings	Fixed Warnings
975	0	0

Summary

Total	High Priority	Normal Priority	Low Priority
975	975	0	O .



02 PMD



Overall results - Files

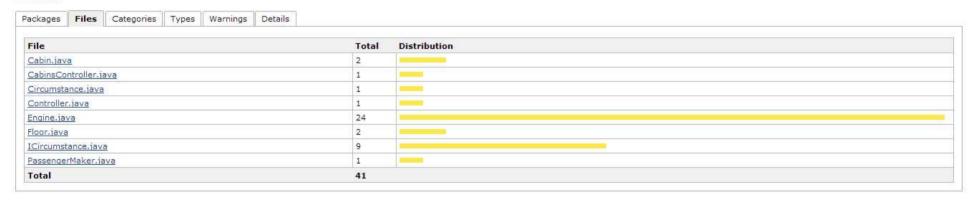
PMD Result

Warnings Trend

All Warnings	New Warnings	Fixed Warnings
41	0	0

Summary

Total	High Priority	Normal Priority	Low Priority
41	0	41	0



Overall results - Types

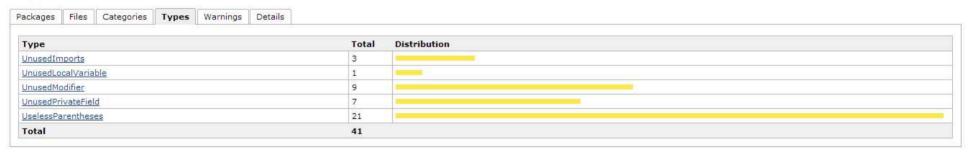
PMD Result

Warnings Trend

All Warnings	New Warnings	Fixed Warnings
41	0	0

Summary

Total	High Priority	Normal Priority	Low Priority
41	0	41	0



Overall results - Warning

File	Package	Line	Priority	Туре	Category
CabinsController.java:5	fecs	5	Normal	UnusedImports	Import Statements
Circumstance.java:27	fecs	27	Normal	UnusedPrivateField	Unused Code
ICircumstance.java:9	fecs.interfaces	9	Normal	UnusedModifier	Unused Code
ICircumstance.java:10	fecs.interfaces	10	Normal	UnusedModifier	Unused Code
ICircumstance.java:11	fecs.interfaces	11	Normal	UnusedModifier	Unused Code
ICircumstance.java:12	fecs.interfaces	12	Normal	UnusedModifier	Unused Code
ICircumstance.java:13	fecs.interfaces	13	Normal	UnusedModifier	Unused Code
ICircumstance.java:15	fecs.interfaces	15	Normal	UnusedModifier	Unused Code
ICircumstance.java:17	fecs.interfaces	17	Normal	UnusedModifier	Unused Code
ICircumstance.java:19	fecs.interfaces	19	Normal	UnusedModifier	Unused Code
ICircumstance.java:20	fecs.interfaces	20	Normal	UnusedModifier	Unused Code
Cabin.java:3	fecs.simulator	3	Normal	UnusedImports	Import Statements
Cabin.java:4	fecs.simulator	4	Normal	UnusedImports	Import Statements
Engine.java:30	fecs.simulator	30	Normal	UnusedPrivateField	Unused Code
Engine.java:31	fecs.simulator	31	Normal	UnusedPrivateField	Unused Code
Engine.java:33	fecs.simulator	33	Normal	UnusedPrivateField	Unused Code
Engine.java:39	fecs.simulator	39	Normal	UnusedPrivateField	Unused Code
Engine.java:59	fecs.simulator	59	Normal	UselessParentheses	Unnecessary
Engine.java:136	fecs.simulator	136	Normal	UselessParentheses	Unnecessary
Engine.java:136	fecs.simulator	136	Normal	UselessParentheses	Unnecessary
Engine.java:138	fecs.simulator	138	Normal	UselessParentheses	Unnecessary
Engine.java:138	fecs.simulator	138	Normal	UselessParentheses	Unnecessary
Engine.java:138	fecs.simulator	138	Normal	UselessParentheses	Unnecessary
Engine.java:140	fecs.simulator	140	Normal	UselessParentheses	Unnecessary
Engine.java:142	fecs.simulator	142	Normal	UselessParentheses	Unnecessary
Engine.java:142	fecs.simulator	142	Normal	UselessParentheses	Unnecessary
Engine.java:154	fecs.simulator	154	Normal	UselessParentheses	Unnecessary
Engine.java:154	fecs.simulator	154	Normal	UselessParentheses	Unnecessary
Engine.java:155	fecs.simulator	155	Normal	UselessParentheses	Unnecessary
Engine.java:157	fecs.simulator	157	Normal	UselessParentheses	Unnecessary
Engine.java:160	fecs.simulator	160	Normal	UselessParentheses	Unnecessary
Engine.java:199	fecs.simulator	199	Normal	UselessParentheses	Unnecessary
Engine.java:203	fecs.simulator	203	Normal	UselessParentheses	Unnecessary
Engine.java:204	fecs.simulator	204	Normal	UselessParentheses	Unnecessary
Engine.java:205	fecs.simulator	205	Normal	UselessParentheses	Unnecessary
Engine.java:253	fecs.simulator	253	Normal	UselessParentheses	Unnecessary
Engine.java:253	fecs.simulator	253	Normal	UselessParentheses	Unnecessary
Floor.java:15	fecs.simulator	15	Normal	UnusedPrivateField	Unused Code
Floor.java:22	fecs.simulator	22	Normal	UnusedLocalVariable	Unused Code
PassengerMaker.java:21	fecs.simulator	21	Normal	UnusedPrivateField	Unused Code
Controller.java:68	fecs.ui	68	Normal	UselessParentheses	Unnecessary

Cyclomatic reports

Location	Class or method	
src/main/java/fecs/CabinsController.java:10:	CabinsController	The class 'CabinsController' has a Cyclomatic Complexity of 11 (Highest = 10)
src/main/java/fecs/CabinsController.java:12:	CabinsController-control	The method 'control' has a Cyclomatic Complexity of 10.
src/main/java/fecs/model/FloorType.java:6:	FloorType	The class 'FloorType' has a Cyclomatic Complexity of 5(Highest = 12).
src/main/java/fecs/model/FloorType.java:19:	FloorType-valueOf	The method 'valueOf' has a Cyclomatic Complexity of 12.
src/main/java/fecs/simulator/Engine.java:25:	Engine	The class 'Engine' has a Cyclomatic Complexity of 2 (Highest = 13).
src/main/java/fecs/simulator/Engine.java:183:	Engine-updateCabin	The method 'updateCabin' has a Cyclomatic Complexity of 13.
src/main/java/fecs/ui/Controller.java:21:	Controller	The class 'Controller' has a Cyclomatic Complexity of 4 (Highest = 13).
src/main/java/fecs/ui/Controller.java:54:	Controller-triggerFail	The method 'triggerFail' has a Cyclomatic Complexity of 13.
src/main/java/fecs/ui/UserInterface.java:19:	UserInterface	The class 'UserInterface' has a Cyclomatic Complexity of 2 (Highest = 20).
src/main/java/fecs/ui/UserInterface.java:63:	UserInterface-init	The method 'init' has a Cyclomatic Complexity of 20.

Number	Level of complexity
1~5	Low complexity
6~8	Moderate complexity
9~10	High complexity
11+	Very high complexity

03 FindBugs



Overall results - Files

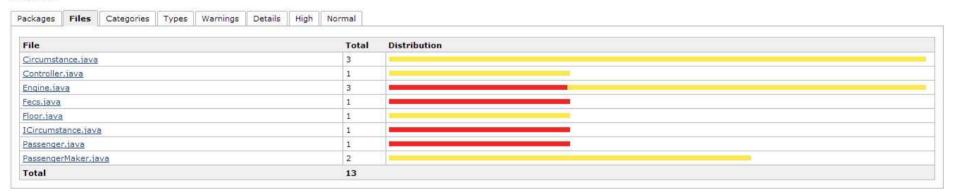
FindBugs Result

Warnings Trend

All Warnings	New this build	Fixed Warnings	
13	0	0	

Summary

Total	High Priority	Normal Priority	Low Priority
13	4	9	0



Overall results - Types

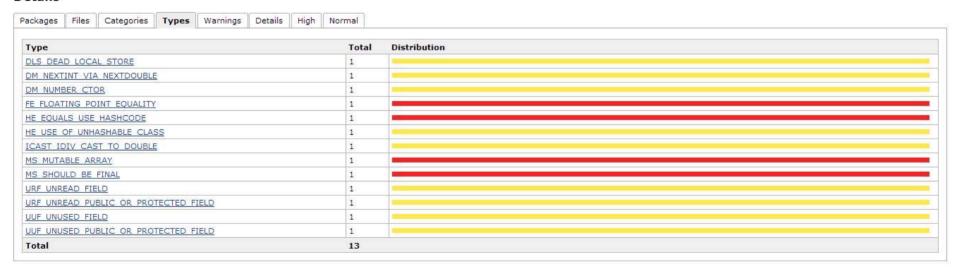
FindBugs Result

Warnings Trend

All Warnings	New this build	Fixed Warnings
13	0	0

Summary

Total	High Priority	Normal Priority	Low Priority
13	4	9	0



Overall results - Warnings

FindBugs Result

Warnings Trend

All Warnings	New this build	Fixed Warnings
13	0	0

Summary

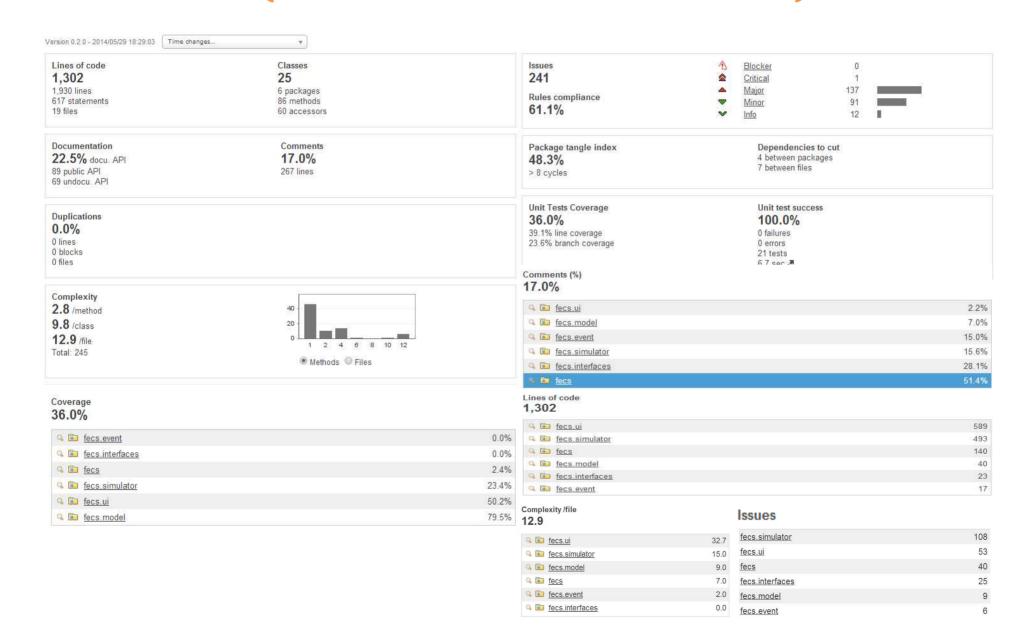
Total	High Priority	Normal Priority	Low Priority
13	4	9	0

File	Package		Line	Priority	Rank	Туре	Category
Circumstance.java:-1	fecs		-	Normal	18	UUF_UNUSED_FIELD	PERFORMANCE
Circumstance.java:-1	fecs		-	Normal	17	UUF_UNUSED_PUBLIC_OR_PROTECTED_FIELD	STYLE
Circumstance.java:31	fecs		31	Normal	18	URF_UNREAD_PUBLIC_OR_PROTECTED_FIELD	STYLE
Fecs.java:50	fecs		50	High	16	MS_SHOULD_BE_FINAL	MALICIOUS_CODE
ICircumstance.java:15	fecs.interfaces	1	15	High	16	MS_MUTABLE_ARRAY	MALICIOUS_CODE
Engine.java:126	fecs.simulator		126	Normal	18	DM_NUMBER_CTOR	PERFORMANCE
Engine.java:138	fecs.simulator		138	Normal	17	ICAST_IDIV_CAST_TO_DOUBLE	STYLE
Engine.java:203	fecs.simulator		203	High	15	FE_FLOATING_POINT_EQUALITY	STYLE
Floor.java:22	fecs.simulator		22	Normal	17	DLS_DEAD_LOCAL_STORE	STYLE
Passenger.java:49	fecs.simulator		49	High	14	HE_EQUALS_USE_HASHCODE	BAD_PRACTICE
PassengerMaker.java:21	fecs.simulator		21	Normal	18	URF_UNREAD_FIELD	PERFORMANCE
PassengerMaker.java:60	fecs.simulator		60	Normal	3	HE_USE_OF_UNHASHABLE_CLASS	CORRECTNESS
Controller.java:63	fecs.ui		63	Normal	18	DM NEXTINT VIA NEXTDOUBLE	PERFORMANCE

04 SONARQube



Overall results



Fecs

fecs.Circumstance Coverage Duplications Issue	ues I COM4 Source			
Lines: 79 Lines of code: 67 Methods: 10 Accessors: 0	Statements: 20 Complexity: 12 Complexity / method: 1.2	Comments (%): 2.9% Comment lines: 2	Public documented API (%): 16.7% Public undocumented API: 5 Public API: 6	Classes: 6 Number of Children: 5 Depth in Tree: 1 Response for Class: 17
fecs fecs.Fecs				
Coverage Duplications Issu	es LCOM4 Source			
Lines: 68 Lines of code: 52 Methods: 4 Accessors: 1	Statements: 17 Complexity: 4 Complexity /method: 1.0	Comments (%): 5.5% Comment lines: 3	Public documented API (%): 33.3% Public undocumented API: 2 Public API: 3	Classes: 1 Number of Children: 0 Depth in Tree: 1 Response for Class: 18
fecs fecs.CabinsControlle Coverage Duplications Issue				
Lines: 98 Lines of code: 21 Methods: 1 Accessors: 0	Statements: 11 Complexity: 12 Complexity / method: 12.0	Comments (%): 76.7% Comment lines: 69	Public documented API (%): 50.0% Public undocumented API: 1 Public API: 2	Classes: Number of Children: Depth in Tree: Response for Class:
Comments (%)			Issues	
Circumstance	2.9%			40
Fecs	5.5%		FloorSet	16
CabinsController	76.7%		CabinsController	12
Lines of code			Circumstance	7
Circumstance	67		Fecs	5
Fecs	52			
CabinsController	21		Coverage	
FloorSet	0			10.00/
Complexity /file			Circumstance	0.0%
CabinsController	12.0		CabinsController	0.0%
Circumstance	12.0		Fecs	9.1%
Fecs	4.0			
FloorSet	0.0			

Fecs.ui

fecs fecs.ui.Controller					
Coverage Duplications Issue	es LCOM4 Source				
Lines: 297 Lines of code: 235 Methods: 15 Accessors: 0	Statements: 141 Complexity: 69 Complexity / method: 4.6	Comments (%): 1.3% Comment lines: 3	Public documented API (%): 6.3% Public undocumented API: 15 Public API: 16		Classes: 1 Number of Children: 0 Depth in Tree: 1 Response for Class: 46
fecs fecs.ui.UserInterface					
Coverage Duplications Issu	es LCOM4 Source				
Lines: 385 Lines of code: 336 Methods: 7 Accessors: 12	Statements: 187 Complexity: 26 Complexity /method: 3.7	Comments (%): 2.6% Comment lines: 9	Public documented API (%): 33.3% Public undocumented API: 4 Public API: 6		Classes: 1 Number of Children: 0 Depth in Tree: 6 Response for Class: 51
fecs fecs.ui.Renderer					
Coverage Duplications Issue	es LCOM4 Source				
Lines: 30 Lines of code: 18 Methods: 3 Accessors: 0	Statements: 5 Complexity: 3 Complexity / method: 1.0	Comments (%): 5.3% Comment lines: 1	Public documented API (%): 25.0% Public undocumented API: 3 Public API: 4		Classes: 1 Number of Children: 0 Depth in Tree: 1 Response for Class: 10
Comments (%)		(Complexity /file		
Controller	1.3%		Controller	69.0	
UserInterface	2.6%	<u> </u>	<u>JserInterface</u>	26.0	
Renderer	5.3%	<u> </u>	Renderer	3.0	
Lines of code			Coverage		
UserInterface	336]	Renderer	0.0%	
Controller	235	9	<u>Controller</u>	50.5%	
Renderer	18		<u>UserInterface</u>	51.9%	
Issues					
<u>UserInterface</u>	33				

20

Controller

Fecs.model

fecs						
fecs.model.FloorType Coverage Duplications Issues	LCOM4 Source					
Lines: 36 Lines of code: 27 Methods: 2 Accessors: 1	Statements: 15 Complexity: 25 Complexity /method: 12.5		Comments (%): 3.6% Comment lines: 1	Public documented API (Public undocumented AP Public API:		Classes: Number of Children: Depth in Tree: Response for Class: 1
ecs fecs.model.Vector						
Coverage Duplications Issues	LCOM4 Source					
Lines: 16 Lines of code: 9 Methods: 2 Accessors: 0	Statements: 2 Complexity: 2 Complexity / method: 1.0		nments (%): 10.0% nment lines: 1	Public documented API (% Public undocumented API: Public API:	5): 50.0% 1 2	Classes: 1 Number of Children: 0 Depth in Tree: 2 Response for Class: 6
fecs fecs.model.CabinType	e					
Coverage Duplications Issu	es LCOM4 Source					
Lines: 9 Lines of code: 4 Methods: 0 Accessors: 0	Statements: 0 Complexity: 0		Comments (%): 20.0% Comment lines: 1		Public API: 1	Classes: Number of Children: Depth in Tree: Response for Class:
Comments (%)				Complexity /file		
FloorType		3.6%		<u>FloorType</u>		25.0
Vector		10.0%		Vector		2.0
CabinType		20.0%		CabinType		0.0
Lines of code						
FloorType		27		Coverage		
<u>Vector</u>		9		Vector		0.0%
CabinType		4		FloorType		93.5%
Issues						
FloorType		9				

Fecs.event

Public documented API (%): 66.7% Public undocumented API: 1 Public API: 3 Classes:

Number of Children: 0
Depth in Tree: 3
Response for Class: 2

fecs fecs.event.ElevatorCall			
Coverage Duplications Issues	LCOM4 Source		
Lines: 33 Lines of code: 17 Methods: 2 Accessors: 1	Statements: 4 Complexity: 2 Complexity / method: 1.0	Comments (%): 1: Comment lines:	5.0%
Comments (%)			
<u>ElevatorCall</u>		15.0%	
Lines of code			
<u>ElevatorCall</u>		17	
Complexity /file			
ElevatorCall		2.0	
ssues			
		-	
<u>ElevatorCall</u>		6	
Coverage			
ElevatorCall		0.0%	

Fecs.simulator

fecs				
fecs.simulator.Passeng	gerMaker			
Coverage Duplications Issues	s LCOM4 Source			
Lines: 84 Lines of code: 58 Methods: 2 Accessors: 6	Statements: 23 Complexity: 8 Complexity /method: 4.0	Comments (%): 3.3% Comment lines: 2	Public documented API (%): 33.3% Public undocumented API: 2 Public API: 3	Classes: 1 Number of Children: 0 Depth in Tree: 1 Response for Class: 23
fecs fecs.simulator.Place				
Coverage Duplications Issue	s LCOM4 Source			
Lines: 41 Lines of code: 29 Methods: 6 Accessors: 0	Statements: 8 Complexity: 6 Complexity / method: 1.0	Comments (%): 3.3% Comment lines: 1	Public documented API (%): 14.3% Public undocumented API: 6 Public API: 7	Classes: 1 Number of Children: 2 Depth in Tree: 1 Response for Class: 9
fecs fecs.simulator.Engine				
Coverage Duplications Issues	<u>LCOM4</u> Source			
Lines: 380 Lines of code: 272 Methods: 12 Accessors: 23	Statements: 137 Complexity: 47 Complexity / method: 3.9	Comments (%): 14.7% Comment lines: 47	Public documented API (%): 12.5% Public undocumented API: 7 Public API: 8	Classes: 1 Number of Children: 0 Depth in Tree: 1 Response for Class: 80
fecs fecs.simulator.Cabin				
Coverage Duplications Issues	LCOM4 Source			
Lines: 114 Lines of code: 68 Methods: 6 Accessors: 9	Statements: 22 Complexity: 9 Complexity /method: 1.5	Comments (%): 21.8% Comment lines: 19	Public documented API (%): 12.5% Public undocumented API: 7 Public API: 8	Classes: 2 Number of Children: 0 Depth in Tree: 2 Response for Class: 11
fecs fecs.simulator.Floor				
Coverage Duplications Issue	s LCOM4 Source			
Lines: 41 Lines of code: 22 Methods: 3 Accessors: 1	Statements: 5 Complexity: 5 Complexity / method: 1.7	Comments (%): 24.1% Comment lines: 7	Public documented API (%): 25.0% Public undocumented API: 3 Public API: 4	Classes: 1 Number of Children: 0 Depth in Tree: 2 Response for Class: 5
ecs fecs.simulator.Passen	ger			
Coverage Duplications Issue	s LCOM4 Source			
Lines: 81 Lines of code: 44 Methods: 2 Accessors: 6	Statements: 20 Complexity: 15 Complexity /method: 7.5	Comments (%): 25.4% Comment lines: 15	Public documented API (%): 33.3% Public undocumented API: 2 Public API: 3	Classes: 2 Number of Children: 0 Depth in Tree: 1 Response for Class: 5

Fecs.simulator

Comments (%)	
<u>Place</u>	3.3%
<u>PassengerMaker</u>	3.3%
<u>Engine</u>	14.7%
Cabin	21.8%
Floor	24.1%
Passenger	25.4%
Lines of code	
Engine	272
Cabin	68
PassengerMaker	58
Passenger	44
Place	29
Floor	22
Coverage	
Engine	19.5%
Passenger	20.0%
Cabin	20.0%
Floor	21.4%
Place	38.5%
<u>PassengerMaker</u>	46.7%

Complexity /file

Engine	47.0
Passenger	15.0
Cabin	9.0
<u>PassengerMaker</u>	8.0
<u>Place</u>	6.0
Floor	5.0
Issues	
<u>Engine</u>	73
Passenger	16
Cabin	8
Floor	6
<u>Place</u>	3
<u>PassengerMaker</u>	2

Fecs.interfaces

Classes:

Classes:

Number of Children: 1
Depth in Tree: 0
Response for Class: 7

Number of Children: 6
Depth in Tree: 0
Response for Class: 3

0.0%

fecs fecs.interfaces.IPassenge			
Lines: 22 Lines of code: 10 Methods: 7 Accessors: 0	Statements: 0 Complexity: 0 Complexity /method: 0.0	Comments (%): 16.7% Comment lines: 2	Public documented API (%): 12.5% Public undocumented API: 7 Public API: 8
fecs fecs.interfaces.lCircumst Coverage Duplications Issues			
Lines: 22 Lines of code: 13 Methods: 2 Accessors: 0	Statements: 0 Complexity: 0 Complexity /method: 0.0	Comments (%): 35.0% Comment lines: 7	Public documented API (%): 33.3% Public undocumented API: 2 Public API: 3
Comments (%)			Coverage
<u>IPassengerMaker</u>		16.7%	<u>ICircumstance</u>
<u>ICircumstance</u>		35.0%	
Lines of code			
ICircumstance		13	
<u>IPassengerMaker</u>		10	
Complexity /file			
<u>IPassengerMaker</u>		0.0	
<u>ICircumstance</u>		0.0	
Issues			
<u>ICircumstance</u>		25	

Description	Component
Utility classes should not have a public or default constructor.	fecs fecs.CabinsController
Rename this local variable name to match the regular expression '^[a-z][a-zA-Z0-9]*\$'.	fecs fecs.CabinsController
Missing curly brace.	fecs fecs.CabinsController
At most one statement is allowed per line, but 2 statements were found on this line.	fecs fecs.CabinsController
Remove the dependency on the source file "fecs.simulator.Floor" to break a package cycle.	fecs fecs.CabinsController
Missing curly brace.	fecs fecs.CabinsController
The Cyclomatic Complexity of this method is 12 which is greater than 10 authorized.	fecs fecs.CabinsController
This block of commented-out lines of code should be removed.	fecs fecs.CabinsController
Rename this local variable name to match the regular expression '^[a-z][a-zA-Z0-9]*\$'.	fecs fecs.CabinsController
This block of commented-out lines of code should be removed.	fecs fecs.CabinsController

Description	Component
<u>Unused import - fecs.model.Vector.</u>	fecs fecs.CabinsControlle
Remove the dependency on the source file "fecs.simulator.Cabin" to break a package cycle.	fecs fecs.CabinsControlle
Variable 'elapsedTime' must be private and have accessor methods.	fecs fecs.Circumstance
Rename this constant name to match the regular expression '^[A-Z][A-Z0-9]*(_[A-Z0-9]+)*\$".	fecs fecs.Circumstance
Missing curly brace.	fecs fecs.Circumstance
Avoid unused private fields such as 'interp'.	fecs fecs.Circumstance
At most one statement is allowed per line, but 2 statements were found on this line.	fecs fecs.Circumstance
Don't use trailing comments.	fecs fecs.Circumstance
Variable 'name' must be private and have accessor methods.	fecs fecs.Circumstance
Remove the dependency on the source file "fecs.ui UserInterface" to break a package cycle.	fecs fecs.Fecs

Description	Component
This block of commented-out lines of code should be removed.	fecs fecs.Fecs
Variable 'interp' must be private and have accessor methods.	fecs fecs.Fecs
A method/constructor shouldn't explicitly throw java.lang.Exception	fecs fecs.Fecs
Remove the dependency on the source file "fecs.simulator.Engine" to break a package cycle.	fecs fecs.Fecs
This block of commented-out lines of code should be removed.	fecs fecs.FloorSet
This block of commented-out lines of code should be removed.	fecs fecs.FloorSet
This block of commented-out lines of code should be removed.	fecs fecs.FloorSet
This block of commented-out lines of code should be removed.	fecs fecs.FloorSet
This block of commented-out lines of code should be removed.	fecs fecs.FloorSet
This block of commented-out lines of code should be removed.	fecs fecs.FloorSet

Description	Component
This block of commented-out lines of code should be removed.	fecs fecs.FloorSet
This block of commented-out lines of code should be removed.	fecs fecs.FloorSet
This block of commented-out lines of code should be removed.	fecs fecs.FloorSet
This block of commented-out lines of code should be removed.	fecs fecs.FloorSet
This block of commented-out lines of code should be removed.	fecs fecs.FloorSet
This block of commented-out lines of code should be removed.	fecs fecs.FloorSet
This block of commented-out lines of code should be removed.	fecs fecs.FloorSet
This block of commented-out lines of code should be removed.	fecs fecs.FloorSet
This block of commented-out lines of code should be removed.	fecs fecs.FloorSet
This block of commented-out lines of code should be removed.	fecs fecs.FloorSet

Description	Component
Consider replacing this Vector with the newer java.util.List	fecs fecs.event.ElevatorCall
Avoid using implementation types like 'Vector'; use the interface instead	fecs fecs.event.ElevatorCall
Consider replacing this Vector with the newer java util.List	fecs fecs.event.ElevatorCall
Avoid using implementation types like 'Vector'; use the interface instead	fecs fecs.event.ElevatorCall
Consider replacing this Vector with the newer java.util.List	fecs fecs.event.ElevatorCall
Avoid using implementation types like 'Vector'; use the interface instead	fecs fecs.event.ElevatorCall
Redundant 'public' modifier.	fecs fecs.interfaces.lCircumstance
Redundant 'public' modifier.	fecs fecs.interfaces.ICircumstance
Remove the dependency on the source file "fecs.Circumstance" to break a package cycle.	fecs fecs.interfaces.lCircumstance
Avoid modifiers which are implied by the context	fecs fecs.interfaces.lCircumstance

Description	Component
Redundant 'public' modifier.	fecs fecs.interfaces.lCircumstance
Avoid modifiers which are implied by the context	fecs fecs.interfaces.lCircumstance
Redundant 'public' modifier.	fecs fecs.interfaces.ICircumstance
Redundant 'public' modifier.	fecs fecs.interfaces.lCircumstance
Avoid modifiers which are implied by the context	fecs fecs.interfaces.lCircumstance
Avoid modifiers which are implied by the context	fecs fecs.interfaces.lCircumstance
Don't use trailing comments.	fecs fecs.interfaces.lCircumstance
Don't use trailing comments.	fecs fecs.interfaces.lCircumstance
Don't use trailing comments.	fecs fecs.interfaces.lCircumstance
Redundant 'public' modifier.	fecs fecs.interfaces.lCircumstance

Description	Component
Avoid modifiers which are implied by the context	fecs fecs.interfaces.lCircumstance
Don't use trailing comments.	fecs fecs.interfaces.ICircumstance
Avoid modifiers which are implied by the context	fecs fecs.interfaces.lCircumstance
Avoid modifiers which are implied by the context	fecs fecs.interfaces.lCircumstance
Redundant 'public' modifier.	fecs fecs.interfaces.lCircumstance
Redundant 'public' modifier.	fecs fecs.interfaces.lCircumstance
Avoid modifiers which are implied by the context	fecs fecs.interfaces.lCircumstance
Avoid modifiers which are implied by the context	fecs fecs.interfaces.lCircumstance
Don't use trailing comments.	fecs fecs.interfaces.lCircumstance
Redundant 'public' modifier.	fecs fecs.interfaces.lCircumstance

Description	Component
Rename this constant name to match the regular expression '^[A-Z][A-Z0-9]*(_[A-Z0-9]+)*\$'.	fecs fecs.interfaces.lCircumstance
'4' is a magic number.	fecs fecs.model.FloorType
'6' is a magic number.	fecs fecs.model.FloorType
'10' is a magic number.	fecs fecs.model.FloorType
'9' is a magic number.	fecs fecs.model.FloorType
The Cyclomatic Complexity of this method is 24 which is greater than 10 authorized.	fecs fecs.model.FloorType
'3' is a magic number.	fecs fecs.model.FloorType
'7' is a magic number.	fecs fecs.model.FloorType
' <u>5' is a magic number.</u>	fecs fecs.model.FloorType
'8' is a magic number.	fecs fecs.model.FloorType

Description	Component
Unused import - fecs.Fecs.	fecs fecs.simulator.Cabin
This block of commented-out lines of code should be removed.	fecs fecs.simulator.Cabin
This block of commented-out lines of code should be removed.	fecs fecs.simulator.Cabin
Unused import - fecs.model.FloorType.	fecs fecs.simulator.Cabin
This block of commented-out lines of code should be removed.	fecs fecs.simulator.Cabin
This block of commented-out lines of code should be removed.	fecs fecs.simulator.Cabin
This block of commented-out lines of code should be removed.	fecs fecs.simulator.Cabin
Missing curly brace.	fecs fecs.simulator.Cabin
This block of commented-out lines of code should be removed.	fecs fecs.simulator.Engine
'700d' is a magic number.	fecs fecs.simulator.Engine

Description	Component
Remove the dependency on the source file "fecs.ui.UserInterface" to break a package cycle.	fecs fecs.simulator.Engine
'0.2' is a magic number.	fecs fecs.simulator.Engine
Rename this constant name to match the regular expression '^[A-Z][A-Z0-9]*(_[A-Z0-9]+)*\$'_	fecs fecs.simulator.Engine
This block of commented-out lines of code should be removed.	fecs.simulator.Engine
'0.5' is a magic number.	fecs fecs.simulator.Engine
This block of commented-out lines of code should be removed.	fecs fecs.simulator.Engine
Missing curly brace.	fecs fecs.simulator.Engine
'0.2' is a magic number.	fecs.simulator.Engine
This block of commented-out lines of code should be removed.	fecs fecs.simulator.Engine
Missing curly brace.	fecs fecs.simulator.Engine

Description	Component
'10' is a magic number.	fecs fecs.simulator.Engine
This block of commented-out lines of code should be removed.	fecs fecs.simulator.Engine
*30° is a magic number.	fecs fecs.simulator.Engine
The Cyclomatic Complexity of this method is 14 which is greater than 10 authorized.	fecs fecs.simulator.Engine
Don't use trailing comments.	fecs fecs.simulator.Engine
'public' modifier out of order with the JLS suggestions.	fecs fecs.simulator.Engine
Missing curly brace.	fecs fecs.simulator.Engine
'0.22' is a magic number.	fecs fecs.simulator.Engine
'27000d' is a magic number.	fecs fecs.simulator.Engine
This block of commented-out lines of code should be removed.	fecs fecs.simulator.Engine

Description	Component
At most one statement is allowed per line, but 2 statements were found on this line.	fecs fecs.simulator.Engine
Missing curly brace.	fecs fecs.simulator.Engine
A method/constructor shouldn't explicitly throw java.lang.Exception	fecs fecs.simulator.Engine
At most one statement is allowed per line, but 2 statements were found on this line.	fecs fecs.simulator.Engine
Avoid instantiating Integer objects. Call Integer.valueOf() instead.	fecs fecs.simulator.Engine
This block of commented-out lines of code should be removed.	fecs fecs.simulator.Engine
Avoid instantiating Integer objects. Call Integer.valueOf() instead.	fecs fecs.simulator.Engine
Don't use trailing comments.	fecs fecs.simulator.Engine
This block of commented-out lines of code should be removed.	fecs fecs.simulator.Engine
Don't use trailing comments.	fecs fecs.simulator.Engine

Description	Component
At most one statement is allowed per line, but 2 statements were found on this line.	fecs fecs.simulator.Engine
Don't use trailing comments.	fecs fecs.simulator.Engine
'10' is a magic number.	fecs fecs.simulator.Engine
At most one statement is allowed per line, but 2 statements were found on this line.	fecs fecs.simulator.Engine
'12' is a magic number.	fecs fecs.simulator.Engine
'1.622d' is a magic number.	fecs fecs.simulator.Engine
Avoid unused private fields such as 'TARGET_WIDTH'.	fecs fecs.simulator.Engine
'10000d' is a magic number.	fecs fecs.simulator.Engine
Missing curly brace.	fecs fecs.simulator.Engine
This block of commented-out lines of code should be removed.	fecs fecs.simulator.Engine

Description	Component
Don't use trailing comments.	fecs fecs.simulator.Engine
Avoid unused private fields such as 'ACCEL'	fecs fecs.simulator.Engine
Remove the dependency on the source file "fecs.ui.Renderer" to break a package cycle.	fecs fecs.simulator.Engine
At most one statement is allowed per line, but 2 statements were found on this line.	fecs fecs.simulator.Engine
*15' is a magic number.	fecs fecs.simulator.Engine
'public' modifier out of order with the JLS suggestions.	fecs fecs.simulator.Engine
Rename this constant name to match the regular expression '^[A-Z][A-Z0-9]*(_[A-Z0-9]+)*\$'.	fecs fecs.simulator.Engine
This block of commented-out lines of code should be removed.	fecs fecs.simulator.Engine
Avoid unused private fields such as 'passengerMaker'.	fecs fecs.simulator.Engine
Define and throw a dedicated exception instead of using a generic one.	fecs fecs.simulator.Engine

Description	Component
A method/constructor shouldn't explicitly throw java.lang.Exception	fecs fecs.simulator.Engine
Missing curly brace.	fecs fecs.simulator.Engine
At most one statement is allowed per line, but 2 statements were found on this line.	fecs fecs.simulator.Engine
Rename this constant name to match the regular expression '^[A-Z][A-Z0-9]*(_[A-Z0-9]+)*\$".	fecs fecs.simulator.Engine
Missing curly brace.	fecs fecs.simulator.Engine
'3.711d' is a magic number.	fecs fecs.simulator.Engine
Avoid unused private fields such as TARGET_HEIGHT.	fecs fecs.simulator.Engine
*8.87d" is a magic number.	fecs fecs.simulator.Engine
Don't use trailing comments.	fecs fecs.simulator.Engine
'public' modifier out of order with the JLS suggestions.	fecs fecs.simulator.Engine

Description	Component
No need to call String.valueOf to append to a string.	fecs fecs.simulator.Engine
'80d' is a magic number.	fecs fecs.simulator.Engine
Don't use trailing comments.	fecs fecs.simulator.Engine
This block of commented-out lines of code should be removed.	fecs fecs.simulator.Engine
'10' is a magic number.	fecs fecs.simulator.Engine
Boolean expression complexity is 4 (max allowed is 3).	fecs fecs.simulator.Engine
'1660d' is a magic number.	fecs fecs.simulator.Engine
'0.001' is a magic number.	fecs fecs.simulator.Engine
Don't use trailing comments.	fecs fecs.simulator.Engine
This block of commented-out lines of code should be removed.	fecs fecs.simulator.Engine

Description	Component
'0.5' is a magic number.	fecs fecs.simulator.Engine
Don't use trailing comments.	fecs fecs.simulator.Floor
Avoid unused private fields such as 'wait'.	fecs fecs.simulator.Floor
Avoid unused local variables such as 'vector'.	fecs fecs.simulator.Floor
Consider replacing this Vector with the newer java.util.List	fecs fecs.simulator.Floor
This block of commented-out lines of code should be removed.	fecs fecs.simulator.Floor
This block of commented-out lines of code should be removed.	fecs fecs.simulator.Floor
This block of commented-out lines of code should be removed.	fecs fecs.simulator.Passenger
The Cyclomatic Complexity of this method is 14 which is greater than 10 authorized.	fecs fecs.simulator.Passenger
At most one statement is allowed per line, but 2 statements were found on this line.	fecs fecs.simulator.Passenger

Description	Component
Missing curly brace.	fecs fecs.simulator.Passenger
At most one statement is allowed per line, but 2 statements were found on this line.	fecs fecs.simulator.Passenger
Missing curly brace.	fecs fecs.simulator.Passenger
This block of commented-out lines of code should be removed.	fecs fecs.simulator.Passenger
Definition of 'equals()' without corresponding definition of 'hashCode()'.	fecs fecs.simulator.Passenger
At most one statement is allowed per line, but 2 statements were found on this line.	fecs fecs.simulator.Passenger
At most one statement is allowed per line, but 2 statements were found on this line.	fecs fecs.simulator.Passenger
At most one statement is allowed per line, but 2 statements were found on this line.	fecs fecs.simulator.Passenger
This block of commented-out lines of code should be removed.	fecs fecs.simulator.Passenger
Missing curly brace.	fecs fecs.simulator.Passenger

Description	Component
This block of commented-out lines of code should be removed.	fecs fecs.simulator.Passenger
Missing curly brace.	fecs fecs.simulator.Passenger
Missing curly brace.	fecs fecs.simulator.Passenger
'30' is a magic number.	fecs fecs.simulator.PassengerMaker
Avoid unused private fields such as 'lastUpdateTime'.	fecs fecs.simulator.PassengerMaker
Variable 'name' must be private and have accessor methods.	fecs fecs.simulator.Place
Variable 'passengers' must be private and have accessor methods.	fecs fecs.simulator.Place
Variable 'position' must be private and have accessor methods.	fecs fecs.simulator.Place
At most one statement is allowed per line, but 2 statements were found on this line.	fecs fecs.ui.Controller
Missing curly brace.	fecs fecs.ui.Controller

Description	Component
The Cyclomatic Complexity of this method is 16 which is greater than 10 authorized.	fecs fecs.ui.Controller
Missing curly brace.	fecs fecs.ui.Controller
'10' is a magic number.	fecs fecs.ui.Controller
Missing curly brace.	fecs fecs.ui.Controller
At most one statement is allowed per line, but 2 statements were found on this line	fecs fecs.ui.Controller
At most one statement is allowed per line, but 2 statements were found on this line.	fecs fecs.ui.Controller
'50.0' is a magic number.	fecs fecs.ui.Controller
*100' is a magic number.	fecs fecs.ui.Controller
Missing curly brace.	fecs fecs.ui.Controller
At most one statement is allowed per line, but 2 statements were found on this line.	fecs fecs.ui.Controller

Description	Component
Missing curly brace.	fecs fecs.ui.Controller
This block of commented-out lines of code should be removed.	fecs fecs.ui.Controller
'50' is a magic number.	fecs fecs.ui.Controller
At most one statement is allowed per line, but 3 statements were found on this line.	fecs fecs.ui.Controller
At most one statement is allowed per line, but 2 statements were found on this line.	fecs fecs.ui.Controller
Missing curly brace.	fecs fecs.ui.Controller
Missing curly brace.	fecs fecs.ui.Controller
'10' is a magic number.	fecs fecs.ui.Controller
'4' is a magic number.	fecs fecs.ui.UserInterface
'3' is a magic number.	fecs fecs.ui.UserInterface

Description	Component
'3' is a magic number.	fecs fecs.ui.UserInterface
'4' is a magic number.	fecs fecs.ui.UserInterface
'3' is a magic number.	fecs fecs.ui.UserInterface
'3' is a magic number.	fecs fecs_ui.UserInterface
'5' is a magic number.	fecs fecs.ui.UserInterface
The method \$\$\$setupUI\$\$\$() has an NCSS line count of 108	fecs fecs.ui.UserInterface
'3' is a magic number.	fecs fecs.ui.UserInterface
'3' is a magic number.	fecs fecs.ui.UserInterface
Rename this method name to match the regular expression '^[a-z][a-zA-Z0-9]*\$'.	fecs fecs.ui.UserInterface
The Cyclomatic Complexity of this method is 20 which is greater than 10 authorized.	fecs fecs.ui.UserInterface

Description	Component
'3' is a magic number.	fecs fecs.ui.UserInterface
'300' is a magic number.	fecs fecs.ui.UserInterface
'3' is a magic number.	fecs fecs.ui.UserInterface
'555' is a magic number.	fecs fecs.ui.UserInterface
'4' is a magic number.	fecs fecs.ui.UserInterface
'3' is a magic number.	fecs fecs.ui.UserInterface
'3' is a magic number.	fecs fecs.ui.UserInterface
'4' is a magic number.	fecs fecs.ui.UserInterface
'4' is a magic number.	fecs fecs.ui.UserInterface
'4' is a magic number.	fecs fecs.ui.UserInterface

Description	Component
'509' is a magic number.	fecs fecs.ui.UserInterface
'610' is a magic number.	fecs fecs.ui.UserInterface
'3' is a magic number.	fecs fecs.ui.UserInterface
'3' is a magic number.	fecs fecs.ui.UserInterface
'4' is a magic number.	fecs fecs.ui.UserInterface
'4' is a magic number.	fecs fecs.ui.UserInterface
Rename this method name to match the regular expression '^[a-z][a-zA-Z0-9]*\$'.	fecs fecs.ui.UserInterface
'4' is a magic number.	fecs fecs ui UserInterface
'3' is a magic number.	fecs fecs.ui.UserInterface
'4' is a magic number.	fecs fecs.ui.UserInterface

Description	Component
<u>"3" is a magic number.</u>	fecs fecs.ui.UserInterface