

Software Engineering Project

Final Examination - Group AM42: Altomare, Colombi, Corbetta

Politecnico di Milano

General functionalities

- Santorini game rules
- Socket
- CLI
- GUI
- Persistence
- Undo

Specific functionalities

- CLI (Standard version)
- CLI (Command Prompt-Compatible)
- Resizable GUI with in-game Chat
- Losing player becomes a spectator

Test coverage

Coverage: All in AM42 ×

27% classes, 21% lines covered in package 'it.polimi.ingsw'

Element	Class, %	Method, %	Line, %
chat	0% (0/1)	0% (0/4)	0% (0/7)
connection	0% (0/14)	0% (0/81)	0% (0/398)
controller	60% (17/28)	47% (83/173)	50% (339/675)
model	100% (58/58)	96% (462/478)	94% (1579/1679)
observer	33% (1/3)	33% (4/12)	8% (22/260)
storage	66% (2/3)	33% (6/18)	23% (25/107)
view	10% (29/279)	5% (75/1347)	2% (145/6682)
ClientApp	0% (0/1)	0% (0/2)	0% (0/51)
ServerApp	0% (0/1)	0% (0/1)	0% (0/34)

» ✓ Tests passed: 215 of 215 tests – 34 s 768 ms

Test coverage - Detail

Coverage: All in AM42 ×

100% classes, 94% lines covered in package 'it.polimi.ingsw.model'

Element	Class, %	Method, %	Line, %
board	100% (10/10)	92% (62/67)	95% (194/203)
card	100% (10/10)	100% (144/144)	99% (439/440)
exceptions	100% (9/9)	70% (12/17)	70% (28/40)
gameRoom	100% (2/2)	93% (14/15)	87% (43/49)
move	100% (5/5)	100% (23/23)	100% (91/91)
persistence	100% (10/10)	94% (80/85)	93% (121/130)
player	100% (11/11)	100% (69/69)	96% (290/300)
Model	100% (1/1)	100% (58/58)	87% (373/426)

» ✓ Tests passed: 215 of 215 tests – 34 s 768 ms

Design patterns

- Model-View-Controller (Distributed MVC)
- Singleton
- Observer
- State
- Facade
- Memento
- Template method