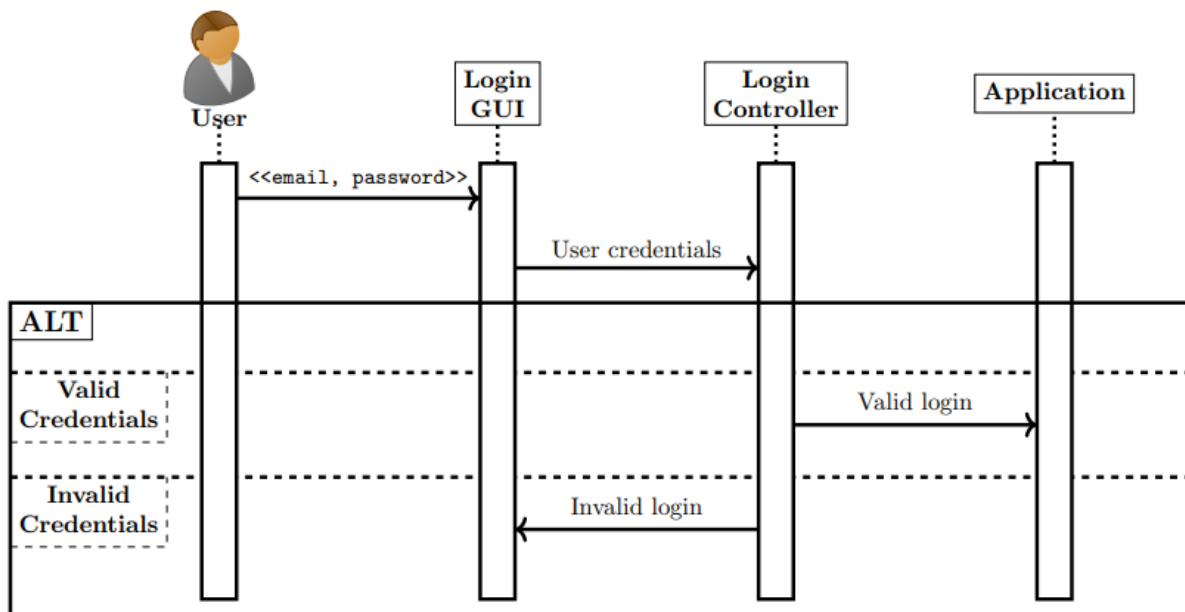
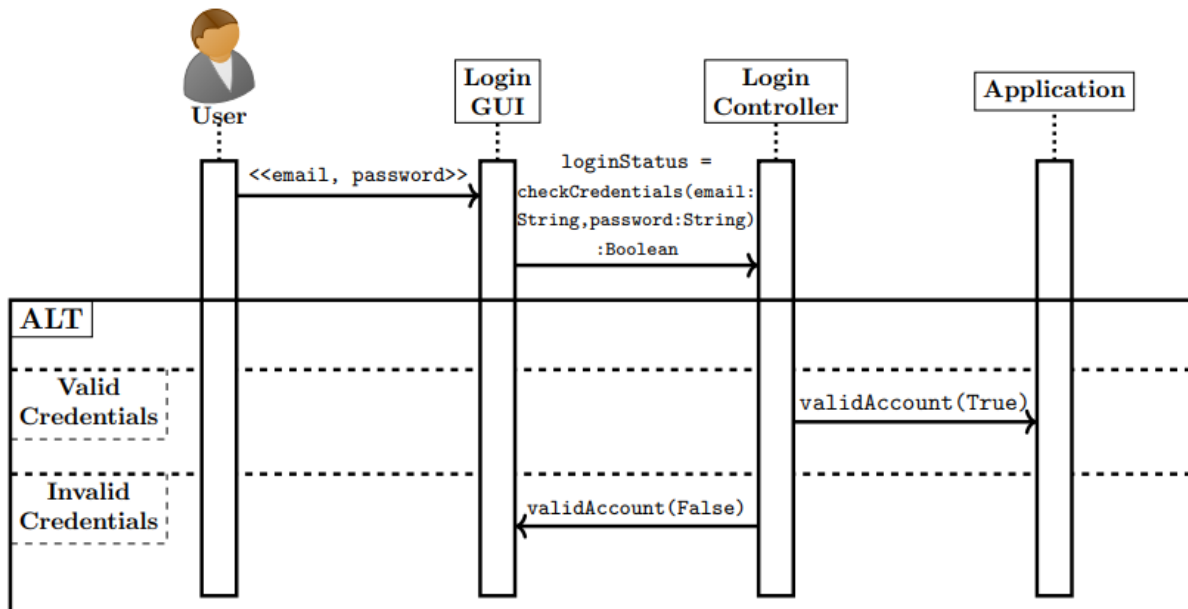


Analysis Sequence Diagram 1: Signing in

Subject	Action of Subject	Other Data/Objects	Object Acted Upon	ID
User	inputs	email and password	Login GUI	1
Login GUI	sends	user credentials	Login Controller	2
If user credentials are valid				3
Login Controller	sends	valid user response	Login GUI	4a
If user credentials are invalid				
Login Controller	sends	Invalid user response	Login GUI	4b



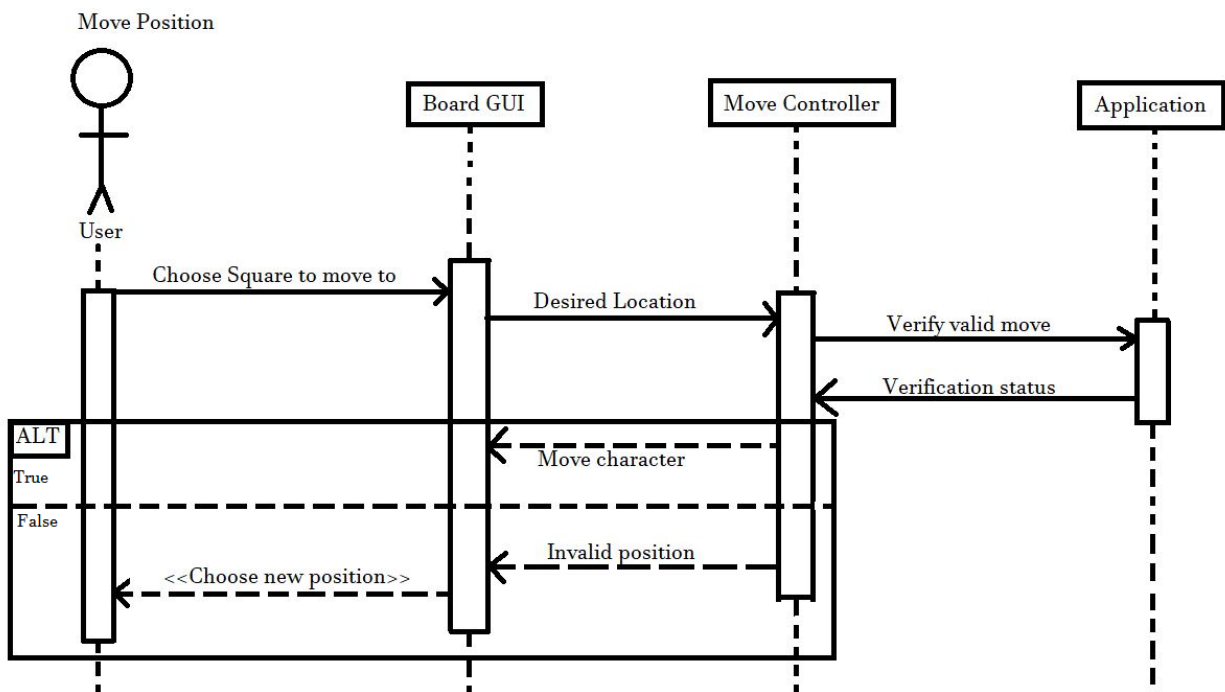
Design Sequence Diagram 1: Signing In



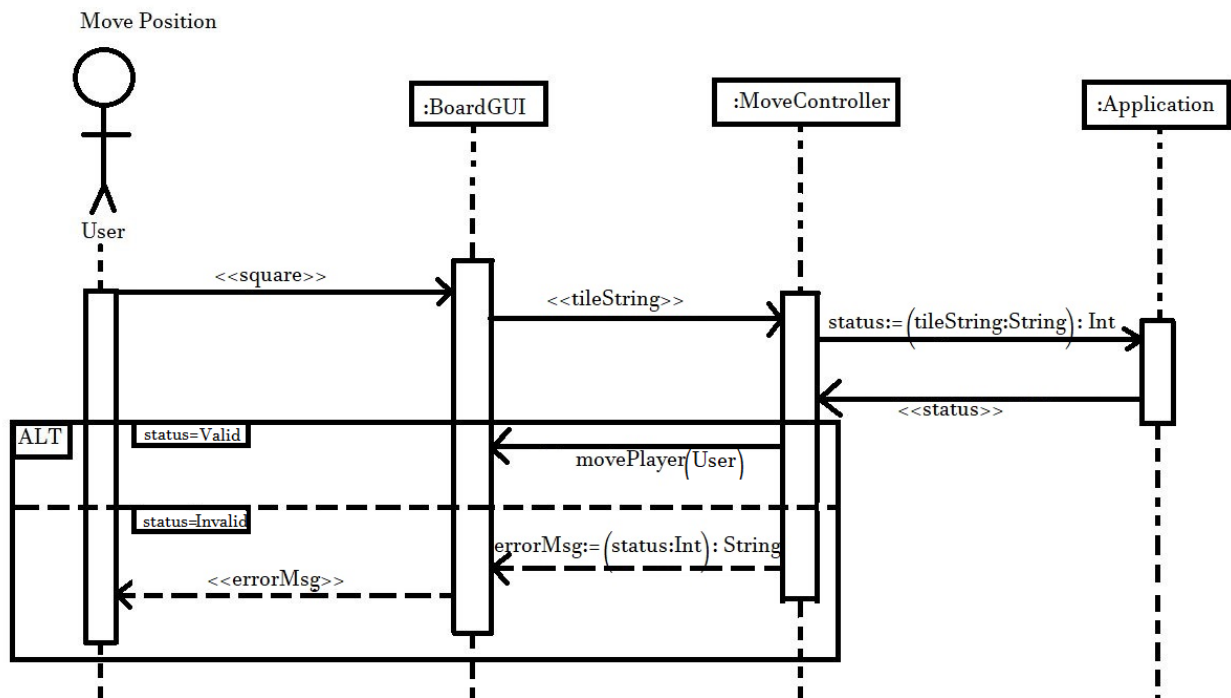
Analysis Sequence Diagram 2: Move position

Subject	Action of Subject	Other Data/Objects	Object Acted Upon	id
User	picks	position	Board GUI	1
Board GUI	sends	position	Move Controller	2
Move Controller	verifies	position	Application	3
Application	sends	Verification status	Move Controller	4
If valid				
Move Controller	moves	character	Board GUI	5a
If invalid				
Move Controller	sends	error	Board GUI	5b
Board GUI	Asks for	New position	User	6b

Analysis Sequence Diagram



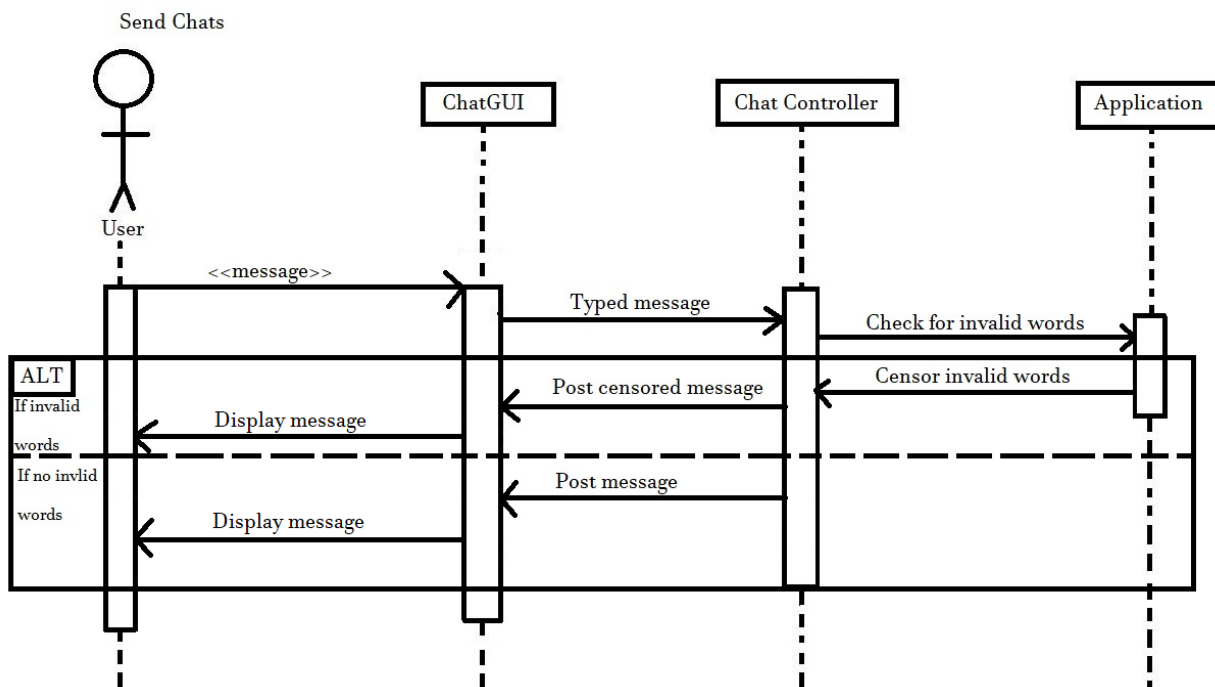
Design Sequence Diagram 2: Move Position



Analysis Sequence Diagram 3: Send Chat

Send Chat

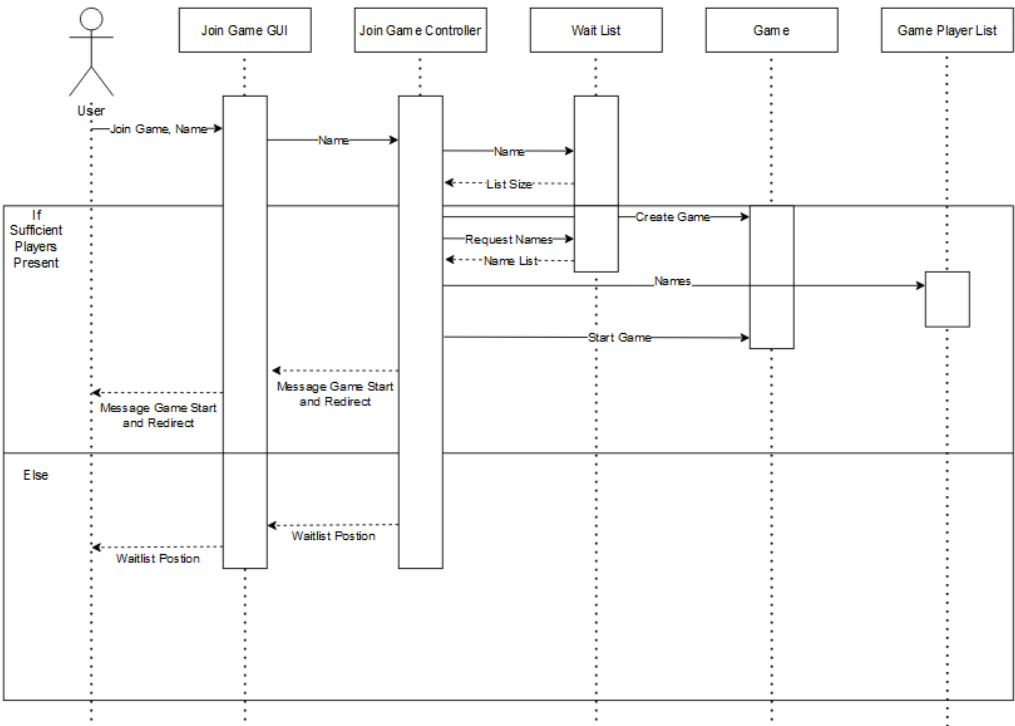
Subject	Action of Subject	Other Data/Objects	Object Acted Upon	id
User	enter	message	Chat GUI	1
Chat GUI	send	message	Chat Controller	2
Chat Controller	Check for	Invalid words	Application	3
If invalid words are found				
Application	censor	Invalid words	Chat Controller	4a
Chat Controller	post	Censored message	Chat GUI	5a
Chat GUI	display	message	User	6a
If no invalid words are found				
Chat Controller	post	message	Chat GUI	4b
Chat GUI	display	message	User	5b



Analysis Sequence Diagram 4: Joining a game

Subject	Action of Subject	Other Data/Objects	Object Acted Upon	id
User	Sends	Join Game Request, Name	Join Game GUI	1
Join Game GUI	Sends	Name	Join Game Controller	1.1
Join Game Controller	Sends	Name	Wait List	1.2
Wait List	Returns	List Size	Join Game Controller	1.3
If sufficient players present				
Wait List	Sends	Create Game	Game	1.4
Join Game Controller	Requests	Name	Wait List	1.4.1
Wait List	Returns	Name List	Join Game Controller	1.4.2
Join Game Controller	Sends	Names	Game Player List	1.4.3
Join Game Controller	Sends	Start Game	Game	1.4.4
Join Game Controller	Sends	Message("Game Started"), Redirect	Join Game GUI	1.4.5
Join Game	Sends	Message("Game Started"), Redirect	User	1.4.6
Else				
Join Game Controller	Sends	Wait List Position	Join Game GUI	1.5

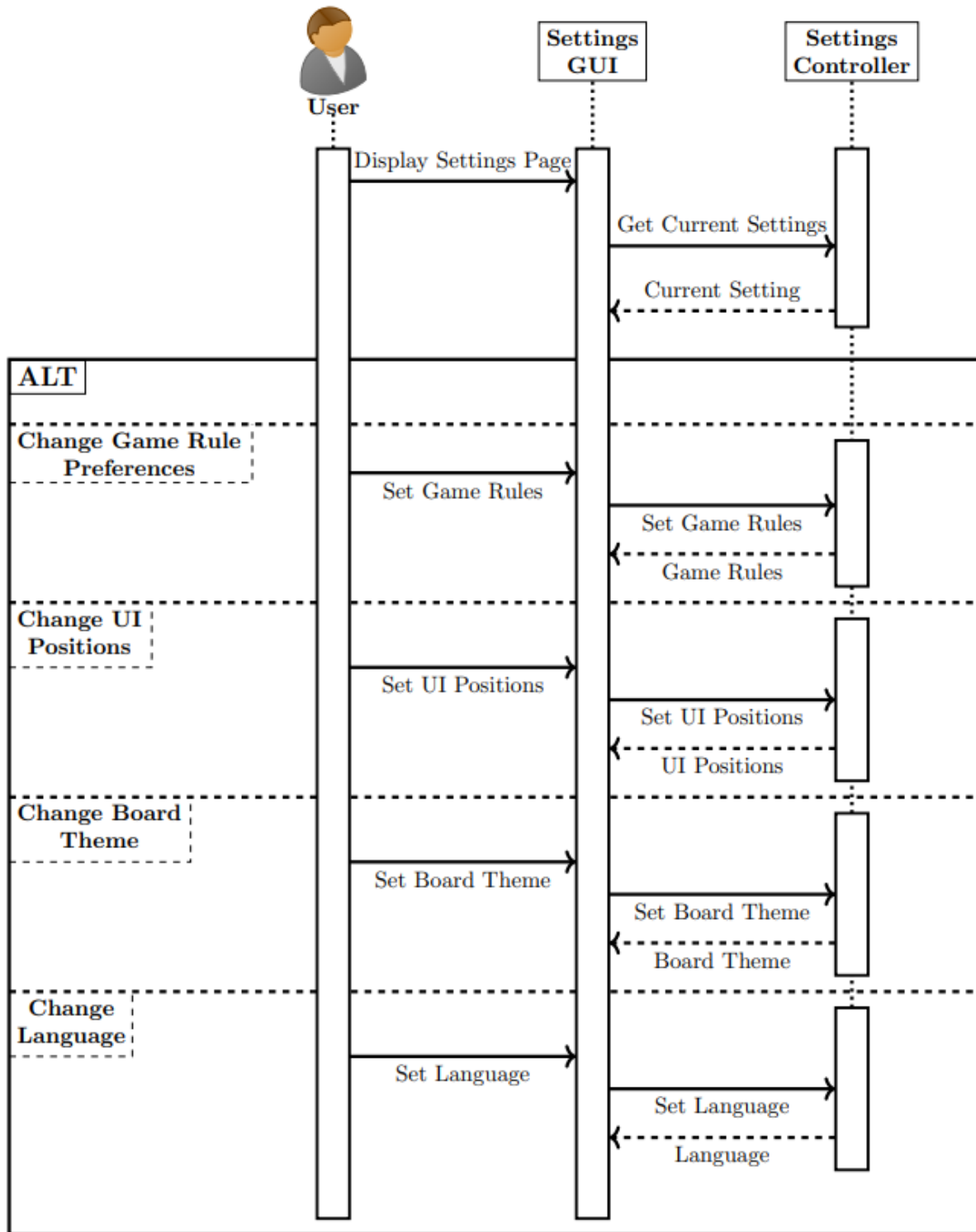
Join Game GUI	Sends	Wait List Position	User	1.5.1
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Analysis Sequence Diagram 5: Settings Customization

Subject	Action of Subject	Other Data/Objects	Objects Acted Upon	id
User	accesses	display settings page	Settings GUI	1
Settings GUI	gets	current settings	Settings Controller	2
Settings Controller	sends	current settings	Settings GUI	3
If user changes game rule preferences				
User	sets	game rules	Settings GUI	4a
Settings GUI	sends	game rule	Settings Controller	5a
Settings Controller	confirms	game rule change	Settings GUI	6a
If user changes UI positions				
User	sets	UI positions	Settings GUI	4b
Settings GUI	sends	UI positions	Settings Controller	5b
Settings Controller	confirms	UI position change	Settings GUI	6b
If user changes board theme				
User	sets	board theme	Settings GUI	4c
Settings GUI	sends	board theme	Settings Controller	5c
Settings Controller	confirms	board theme change	Settings GUI	6c
If user changes				

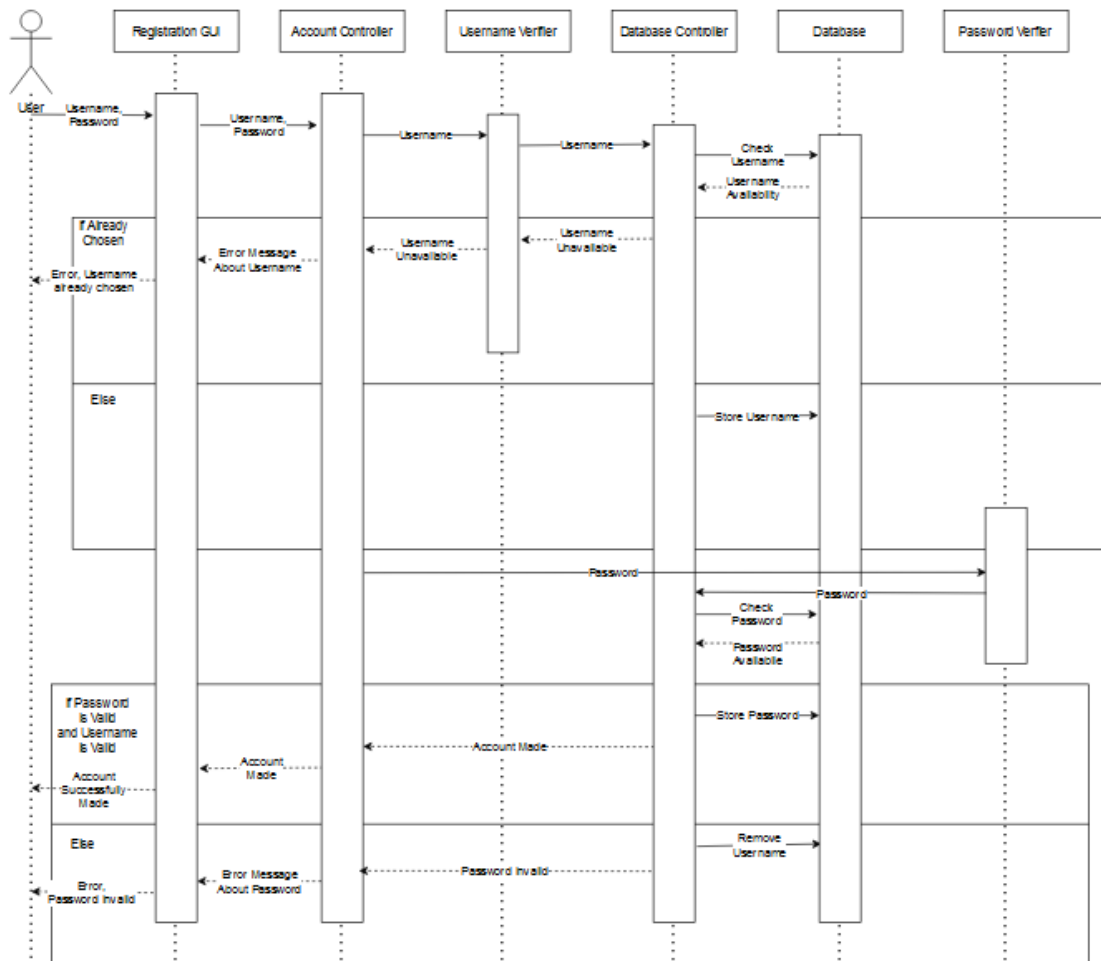
language				
User	sets	language	Settings GUI	4d
Settings GUI	sends	language	Settings Controller	5d
Settings Controller	confirms	language change	Settings GUI	6d



Analysis Sequence Diagram 6: Registering

Subject	Action of subject	Other data/object	Object acted upon	ID
User	enters	Username, password	Registration GUI	1
Registration GUI	sends	Username, password	Account controller	2
Account controller	sends	username	Username verifier	3
Username verifier	sends	username	Database controller	4
Database controller	checks	username	database	5
database	sends	username	availability	6
If already chosen				
Database controller	says	Username unavailable	Username verifier	7a
Username verifier	says	Username unavailable	Account controller	8a
Account controller	sends	Error message	Registration GUI	9a
Registration GUI	displays	Error message	User	10a
else				
Database controller	store	username	database	7b
Account controller	sends	password	Password verifier	11
Password verifier	Sends	password	Database controller	12
Database controller	Check	password	database	13
database	sends	Password availability	Database controller	14

If password and username are valid				
Database controller	store	password	database	15a
Database controller	make	Account	Account controller	16a
Account controller	say	Account made	Registration GUI	17a
Registration GUI	displays	Success message	User`	18a
else				
Database controller	Remove	username	database	15b
Database controller	say	Password invalid	Account controller	16b
Account controller	send	Error message	Registration GUI	17b
Registration GUI	display	Error message	User	18b



Analysis Sequence Diagram 7: Purchasing Items in Store

Subject	Action of subject	Other data/object	Object acted upon	ID
User	Navigates to	shop	ShopGUI	1
Shop GUI	fetch	items	Shop Manager	2
Shop Manager	generates	items	Shop GUI	3
Shop GUI	displays	items	User	4
User	selects	item	Shop GUI	5
If user selects board theme				
Shop GUI	displays	Board theme	User	6a
User	preview	Theme	Shop GUI	7a
Shop GUI	display	In game theme	User	8a
If user selects non-theme				
Shop GUI	display	Item description	User	6b
User	Choose	purchase item	Shop GUI	9
Shop GUI	display	confirmation	User	10
If user selects no				
User	chooses	no	Shop GUI	11a
Shop GUI	Return to	shop	User	12a
If user selects yes				
User	Chooses	yes	Shop GUI	11b
Shop GUI	request	Purchase manager	Shop manager	12b
Shop manager	request	Purchase manager	Purchase manager	13b
Purchase manager	display	Purchase manager GUI	User	14b

User	complete	transaction	Purchase manager	15b
Purchase manager	confirm	transaction	Shop manager	16b
Shop manager	Return to	shop	Shop GUI	17b
Shop GUI	display	Success message	User	18b

