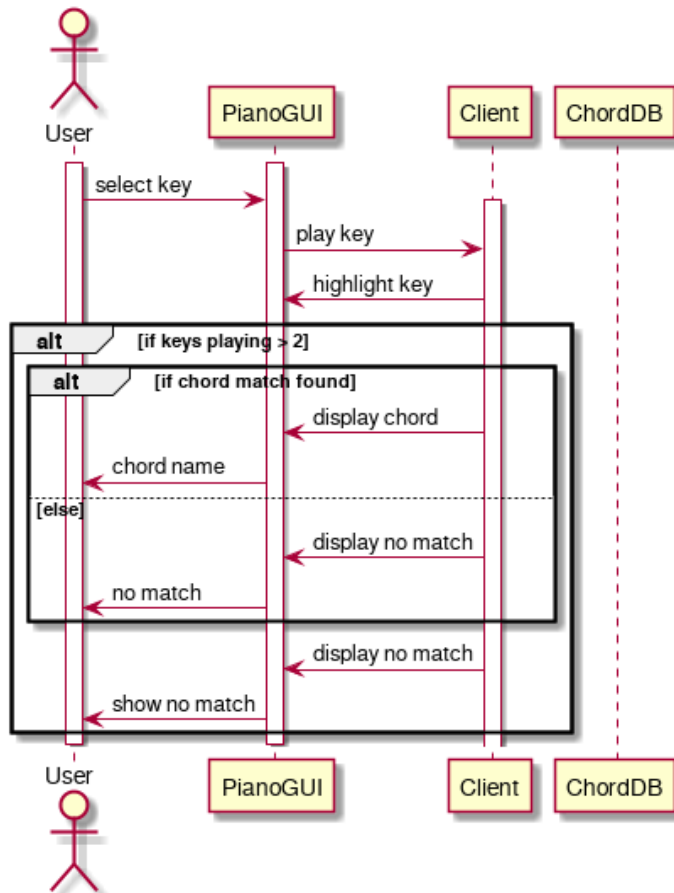


# Sequence Diagram Documents

## Find Chord

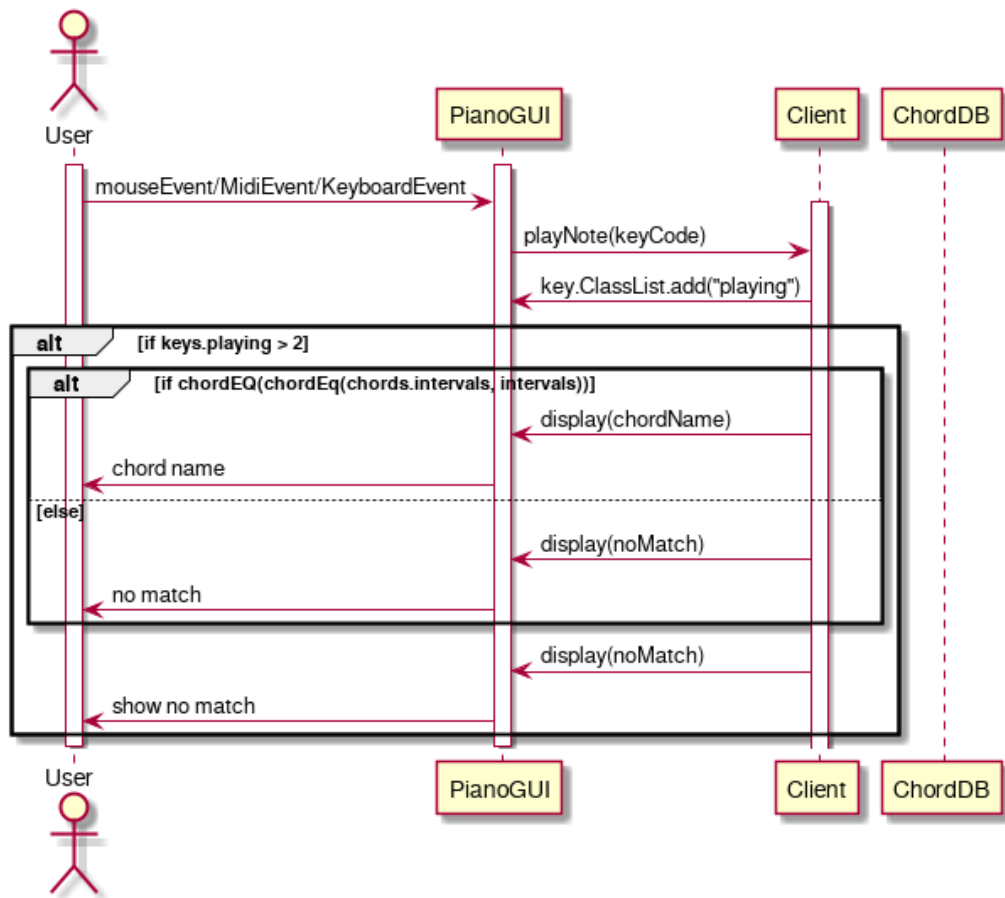
### Analysis Diagram



### Description

#	Subject	Subject Action	Parameters	Object acted upon
1	User	select	key	PianoGUI
2	PianoGUI	play	key	Client
2.1	Client	highlight	pianoKey	PianoGUI
3	If > 2 playing notes			
3.2	If Chord Match found			
3.2.2	Client	display	chord	PianoGUI
3.2.3	PianoGUI	show	chord	User
3.2	else			
3.2.1	Client	display	no match	PianoGUI
3.2.2	PianoGUI	show	no match	User
3	else			
3.1	Client	display	no match	PianoGUI
3.2	PianoGUI	show	no match	User

## Design Diagram



[Sign in with Google](#)

Analysis Diagram



## Description

#	Subject	Subject Action	Parameters	Object acted upon
1	User	select	Sign-in	GUI
1.1	GUI	sign-in	Google	GoogleSSO
2.1	User	sign-in	Google account	GoogleSSO
4.	GoogleSSO	onSignIn	googleUser	Client
4.1	Client	verify	token	Backend
4.2	If token is valid			
4.2.1	Backend	pass	user-data	Client
4.2.2	Client	message	login success	GUI
4.2.3	GUI	message	logged in	User
4.2	else			
4.2.1	Backend	message	token invalid	Client
4.2.2	Client	message	login failure	GUI
4.2.3	GUI	message	login failed	User

## Design Diagram



## Upload Progression

### Analysis Diagram



## Description

#	Subject	Subject Action	Parameters	Object acted upon
1	User	upload	Progression	GUI
2	GUI	send	Progression	Client
3	Client	send	Progression	FileChecker
4.1	If progression is valid			
4.1.1	FileChecker	returns	message	client
4.1.2	Client	displays	message	GUI
4.2	else			
4.2.1	FileChecker	returns	message	client
4.2.2	Client	displays	message	GUI

## Design Diagram



## Download Progression

### Analysis Diagram



### Description

#	Subject	Subject Action	Parameters	Object acted upon
1	User	save	Progression	GUI
2	GUI	send	Progression	Client
3.1	If progression is valid			

#	Subject	Subject Action	Parameters	Object acted upon
3.1.1 Client	displays	message	GUI	
3.2 else				
3.2.1 Client	sends	Progression	FileBuilder	
3.2.2 FileBuilder	returns	file	Client	
3.2.3 Client	returns	file	GUI	
3.2.4 GUI	sends	file	User	

## Design Diagram



## Chord Exercise

### Analysis Diagram



## Description

#	Subject	Subject Action	Parameters	Object acted upon
1	User	selects	chord exercise id	GUI
2	GUI	send	exercise	Client
3	Client	retrieves	exercise	ExerciseDB
4	ExerciseDB	returns	exercise	Client
5.1	If name chord exercise			
5.1.1	Client	displays	name form	GUI
5.2	else			
5.2.1	Client	displays	chord form	GUI
6	User	sends	answer	GUI
7	GUI	checks	answer	Client
8	Client	returns	result	GUI
9.1	If user not satisfied with answer			
9.1.1	Client	sends	answer	GUI
9.2	Else			
9.2.1	Client	sends	next exercise id	GUI

## Design Diagram





## Progression Exercise

### Analysis Diagram



## Description

#	Subject	Subject Action	Parameters	Object acted upon
1	User	selects	progression exercise id	GUI
2	GUI	send	exercise	Client
3	Client	retrieves	exercise	ExerciseDB
4	ExerciseDB	returns	exercise	Client
5	Client	displays	progression form	GUI
6	User	sends	answer	GUI
7	GUI	measures accuracy	answer	Client
8	Client	returns	result	GUI
9.1	If user not satisfied with answer			
9.1.1	Client	sends	answer	GUI
9.2	Else			
9.2.1	Client	sends	next exercise id	GUI

## Design Diagram

