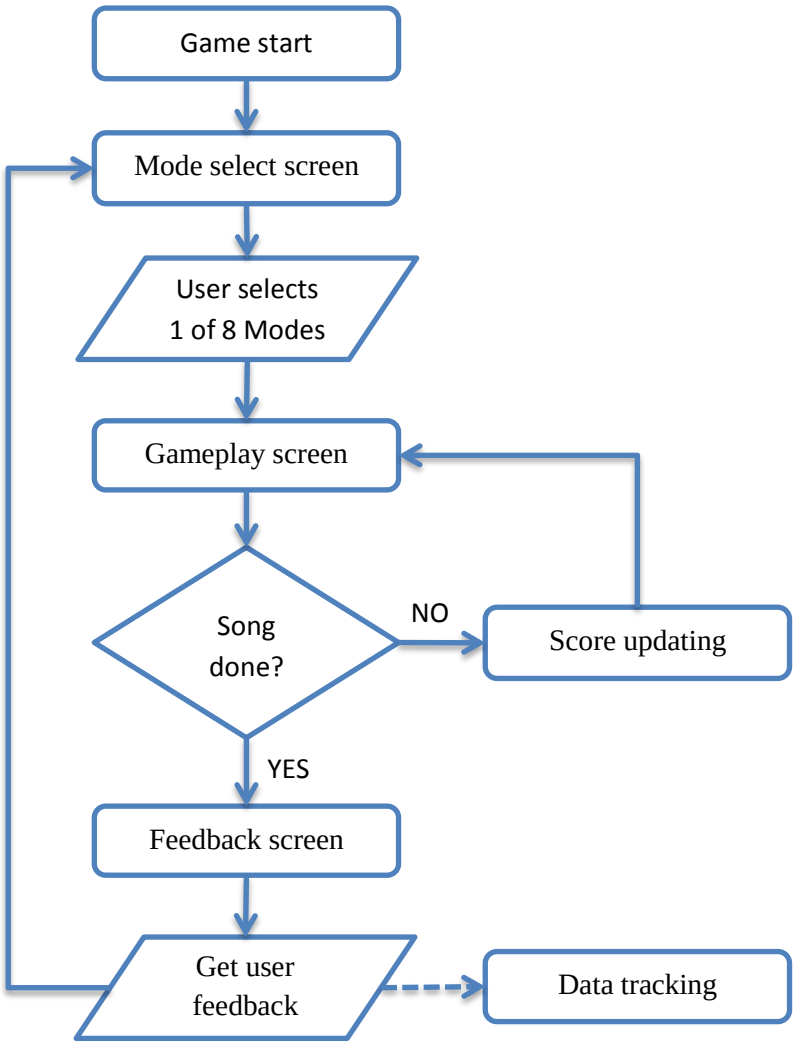
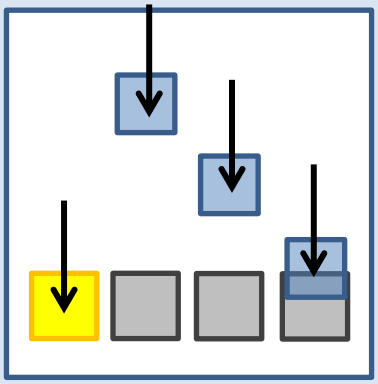
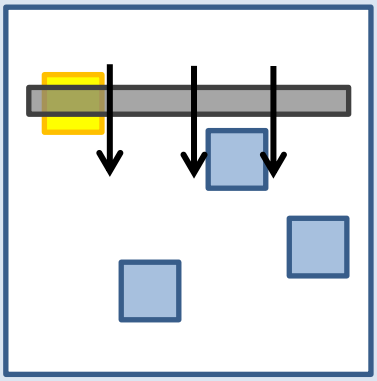
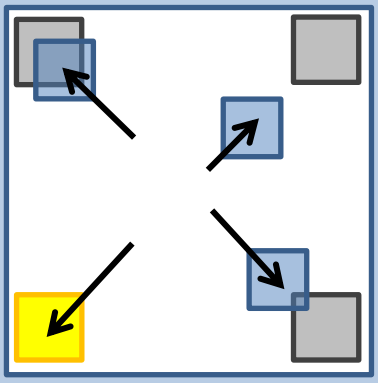
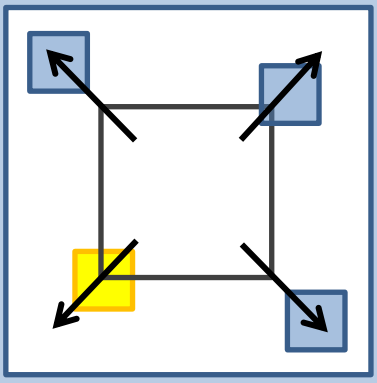
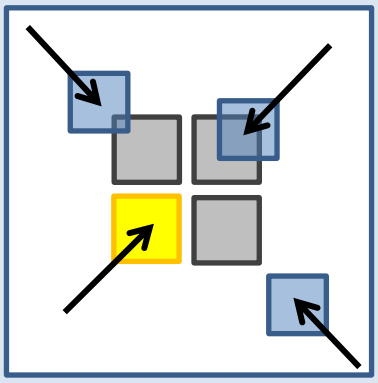
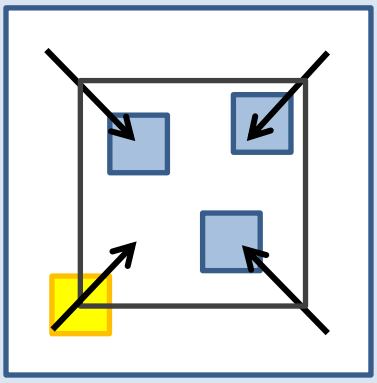
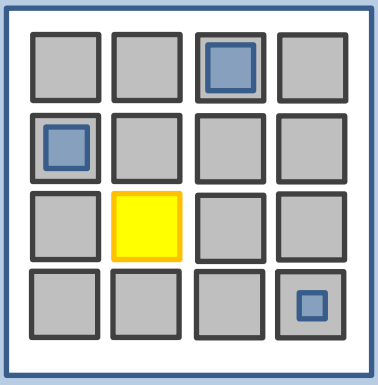
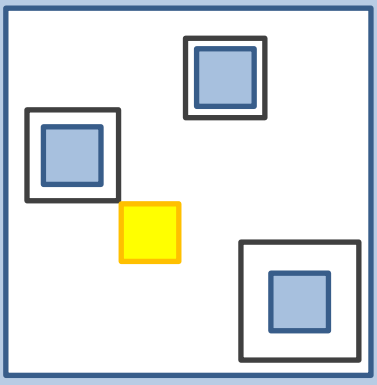


Accuracy Value	Timing
INACTIVE	< -300ms
ALMOST	-300ms
GOOD	-210ms
GREAT	-150ms
PERFECT	-90ms
MARVELOUS	-30ms
PERFECT	40ms
GREAT	120ms
GOOD	200ms
ALMOST	280ms
MISS	400ms

Design	User Responsiveness	Gameplay Experience
#1: Falling Notes	Great	Bad
#2: Spreading Notes	Great	Great
#3: Focusing Notes	Good	Good
#4: Grid	Poor	Great
#5: Sliding Hitbox	Good	Good
#6: Expanding Hitbox	Poor	Poor
#7: Collapsing Hitbox	Bad	Bad
#8: Appearing	Poor	Great

Rhythm Game	Layout	Notes	Hitbox	Movement	Design
Dance Dance Revolution	4/6 columns	4/6 arrows	Box at top	Notes scroll up	Falling Notes
In The Groove	4 columns	4 arrows	Box at bottom	Notes scroll up	Falling Notes
Pump It Up NX	5 columns	4 arrows + middle stomp	Box at bottom	Notes scroll up	Falling Notes
Dance Maniax	4 columns	4 motion sensors	Bar at top	Notes scroll up	Falling Notes
Beatmania IIDX	6/8 columns	5/7 bars + 1 scratch	Bar at bottom	Notes fall down	Falling Notes
Pop 'N Music	9 columns	9 buttons	Bar at bottom	Notes fall down	Falling Notes
DJMax	4/5/6/8 columns	4/5/6/8 bars	Bar at bottom	Notes fall down	Falling Notes
GuitarFreaks	3 columns	3 tabs	Bar at bottom	Notes fall down	Falling Notes
Drummania	6 columns	5 drum + 1 foot pedal	Bar at bottom	Notes fall down	Falling Notes
Keyboardmania	24 columns	24 keys	Bar at bottom	Notes fall down	Falling Notes
Guitar Hero	5 columns	5 tabs	Bar at bottom	Notes approach from distance	Spreading Notes
DJ Hero	3 columns	3 buttons on scratch	Bar at bottom	Notes approach from distance	Spreading Notes
Rockband	5 columns	5 tabs or 4 drum + 1 foot pedal	Bar at bottom	Notes approach from distance	Spreading Notes
Taiko no Tatsujin	1 row	2 drum parts	Box on side	Notes stream to single point	Streaming Notes
The iDOLM@STER	1 row	6 buttons	Box on side	Notes stream to single point	Streaming Notes
Hatsune Miku: Project DIVA	Fullscreen	8 buttons	Sequence of hitboxes	Notes focus to corresponding hitbox	Focusing Notes
Gitaroo Man Lives!	Fullscreen	4 buttons	Box in centre	Notes focus to single point	Focusing Notes
DJMax Technika	3/4 rows	3/4 buttons	Moving bar	Hitbox slides across rows	Sliding Hitbox
Parappa The Rapper	1 row	4 buttons	Cursor	Cursor slides across row	Sliding Cursor
Audition Online	1 row	4 arrows	Cursor	Cursor slides across row	Sliding Cursor
Osu! Tatakae! Ouendan	Fullscreen	Anywhere buttons	Shrinking rings	Rings shrink around buttons	Appearing
jubeat	Grid	16 buttons	Collapsing box	Box solid fills grid	Grid

Moving Notes, Fixed Hitboxes		Moving Hitbox, Fixed Notes	
Diagram	**Description**	**Diagram**	**Description**
	**Design #1: Falling Notes** **Moving notes** fall toward **fixed hitboxes** from **top to bottom**		**Design #5: Sliding Hitbox** **Moving hitbox** fall toward **fixed notes** appearing from **top to bottom**
	**Design #2: Spreading Notes** **Moving notes** slide toward **fixed hitboxes** from **centre to corners**		**Design #6: Expanding Hitbox** **Expanding hitbox** grow toward **fixed notes** from **centre to corners**
	**Design #3: Focusing Notes** **Moving notes** slide toward **fixed hitboxes** from **corners to centre**		**Design #7: Collapsing Hitbox** **Collapsing hitbox** shink toward **fixed notes** from **corners to centre**
	**Design #4: Grid** **Expanding notes** grow in **fixed hitboxes** at **grid points**		**Design #8: Appearing** **Collapsing hitboxes** shrink around **fixed notes** appearing at **grid points**