

Requirement	Description	Type	Rationale
SB_01	The bowl shall rest on a platform that can spin the bowl.	System	
SB_01_1	The bowl shall spin up to 30 RPMs	Software	The bowl will not sing if slower than 30RPMs
SB_01_1_1	The bowl shall spin using stepper motor 28BYJ-48	Design	This stepper motor is quite and easily controlled
SB_01_1_2	The motor shall be controlled using 4 digital outputs	Software	Stepper motor controller uses 4 inputs
SB_01_1_3	The motor speed shall be adjustable from 0-30RPMs	Software	Control starts and stops of rotation
SB_01.2	The platform base shall be at least 90mm for width and length	Design	The bowl is 90mm diameter
SB_01.3	The platform base shall have a hollow bottom that is at least 20mm	Design	To store motor and electronics
SB_02	The singing bowl shall be played by a solid wooden striker	System	
SB_02_1	The platform shall have a side support to hold the striker 30mm above the top edge of the bowl	Design	Support for the striker

SB_02_2	The platform shall contain a mini-servo to mount the striker for movement	Design	
SB_02_2_1	The servo shall be controlled using PWM	Software	Server control is with PWM
SB_03	The platform shall be wireless controlled	Hardware	Will use the Wemos Lite for wireless control
SB_04	The main controller shall control 1 or more platforms	System	Use the PSOC 6 Wifi-BT for main controller
SB_04_1	The platforms shall be controlled using restful services	Software	
SB_04_2	The platform controller shall store a default playset	Software	Playsets will be instructions on how to play remote devices
SB_04_03	The main controller shall be able to start and stop the remote platforms	Software	