


# The Dueling Association Presents HARRY POTTER and the BIWIZARD TOURNAMENT



## Q: Harry Potter and the what?

*Biwizard Tournament! Because “bi” means two and there are two wizards involved: you and your opponent! Haha, so clever!*

This is our final project for our Spring 2016 Software Design class at the Olin College of Engineering. We are huge nerds when it comes to Harry Potter, so we thought it would be pretty rad to create this: a Harry Potter dueling game! In this game, the player battles against Voldemort and his army of villains. Voldemort casts a number of spells, which inflict damage on the player. The player can return fire by waving their own “wand” (a green object, which is detected by OpenCV) in special patterns, thereby casting spells.

## Q: How do I play?

All you need is a laptop with a webcam, a green object (the more wand-like it is, the better), and a willingness to indulge in your inner Harry Potter nerd! Oh, you’ll also need to install some libraries, but we’re not going to go into detail about that here. If you want, just visit our site at <https://sites.google.com/site/theduelingassociation> for all the information that you need!

Here are the rules of the game:

- 1. DON’T DIE. But if you do die, simply press the R key to Resurrect yourself.
- 2. Your opponent has 100 HP, while you have 500 HP. We don’t think this is fair either, but life ain’t fair, son.
- 3. The more complex the spell that you cast, the more damage you deal.
- 4. If you accidentally botch your spell, simply press the C key to Clear the spell.
- 5. If you decide that you’ve had enough of this weird game, simply press the Q key to Quit.

And finally, here are all our spell patterns! The more complex the spell, the more damage it deals.

Avada Kedavra (100 HP)	Expelliarmus (100 HP)	Stupefy (100 HP)																											
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Incendio (50 HP)	Flipendo (25 HP)	Wingardium Leviosa (25 HP)																											
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## Q: UML Class Diagram?

Aww, we’re so glad you asked! Here you go.

