

# Assignment

*This assignment is the examination of this course. This means that if you finish this assignment properly you will pass the course. When you've done the assignment you can hand it in at [courses.vsw.se/assignments.php](https://courses.vsw.se/assignments.php) . When it has been handed in it will be corrected and marked. If everything was fine with your assignment you'll pass the course. If something was wrong you'll get it back together with some feedback about it. Fix whatever that was wrong and hand it in again. You can't really fail a course since you can just hand in new versions of an assignment. Note however that if you send in too many assignments your assignment won't be prioritized when marking it. You should therefore make sure to always double check your code before sending it in.*

Your task is to make a block shooting a special type of fireworks. All the requirements can be seen below. These requirements must be met.

1. The block should shoot a special (non-vanilla) firework once every 12th seconds.
2. The block can have different types, to change type right click it with one of a few special items. If you right click it with item 1 the block should get type 1 and so on. The block should have different textures depending on its type.
3. The special firework should be an entity that you create, after flying 10 meters into the air it should be removed. It should get the same type as the block and should be rendered differently depending on the type. The rendering code is supplied further down in this document.
4. The items that are being used to change the block type should all use the same id. They should also be consumed when used. Use different names and icons for the different items.
5. The block should emit a particle every 3<sup>rd</sup> second. Because of this you can't use `randomDisplayTick` to control it. When the entity is fired a sound should be played. The particle can be a vanilla particle, the sound can not be a vanilla sound.
6. The server is the one controlling the timer. You're not allowed to let the client control the block's timer. That's the case for both shooting the entity and for displaying the particle.
7. Everything must be saved and loaded again after the world has been restarted.

The following file can be downloaded for resource files. It includes icons for the blocks and items as well as the sound file. It also contains rendering code for the entity, you will have to modify it slightly to make it fit your entity (just follow the instructions in the render file). You won't have to edit the model class at all. The resources in the zip file are not required, as long as you follow the seven requirements above you can use whichever textures and sounds you want.

<https://dl.dropboxusercontent.com/u/46486053/Assignment03Resources.zip>

The code should be easy to follow, be expandable, well documented, be able to prevent errors and should use the content of the course properly.

## Submitting

When submitting your mod you should send me the source code and the exported mod. The exported mod should be runnable without any problems. The source should contain all the content of your mod, it shouldn't contain anything else. Do NOT include your eclipse environment or the minecraft source.

*By Vidar Swenning*