

**Background:** With the improvement of the material level, more and more domestic waste is generated by residents, and the task of waste disposal is very heavy. At this time, it is extremely important to strengthen residents' awareness of garbage classification. Our project is mainly aimed at community residents. The main purpose is to spread the knowledge of garbage classification to residents through this VR game, to stimulate the enthusiasm of community residents to participate in activities and guide residents to participate in garbage classification. To deepen the residents' understanding of garbage classification, let residents do the initial garbage classification from home, especially children at home, let them develop a good habit of garbage classification from an early age.

**Game introduction:** In the first level, drag the color block to the trash can through the handle, and check the color of the trash can. The second level has a knowledge board to spread knowledge. In the third level, enter the vr scene, drag the trash yourself, and throw it into the corresponding trash can. For example, the recyclable category and the non-recyclable category, if you throw it right, you will get extra points, and then when a certain score is reached, the game will end and the victory screen will be displayed.

**Design values:**By letting users feel immersive, help them deepen their understanding of garbage classification, rather than traditionally through brochures or community advertising, VR technology is more attractive to users than traditional monotonous teaching's eyeballs, in personal experience, spread this classification knowledge to users.

**Technical overview:** unity3d, AI, C4d, 3dMax.

Unity3d implementation technology, AI for interface, c4d and 3dmax for model, (such as trash can, ground garbage, etc.)

The user puts on VR glasses and holds the handle. First enter the first level, change the color of the trash can, drag the corresponding color block to the trash can model accurately, and check the color of the trash can for the user. The second level is to popularize waste

classification knowledge. Users can learn the waste classification knowledge on the panel and can use it flexibly in the actual experience of the next level. The third level is to enter the actual scene to carry out the actual operation of garbage classification, move through the control handle, and pick up the garbage through the handle, throw it into the corresponding trash bin, and add one point for each pair of throws, reaching a certain score to display the victory interface , The user experience ends.