

Assignment #1

When you age, accepting that you can't do the things you used to becomes a complex and difficult process. Some never fully acknowledge this, and unfortunately, their bodies can't keep up with their minds. It is officially recommended that you stop using ladders at age 65. While your mind is ready to tackle tasks around your house, you have to slowly accept that help is needed for every aspect you used to handle yourself. The same realization comes when someone is injured or becomes disabled. What is considered "normal" ends up not being so normal.

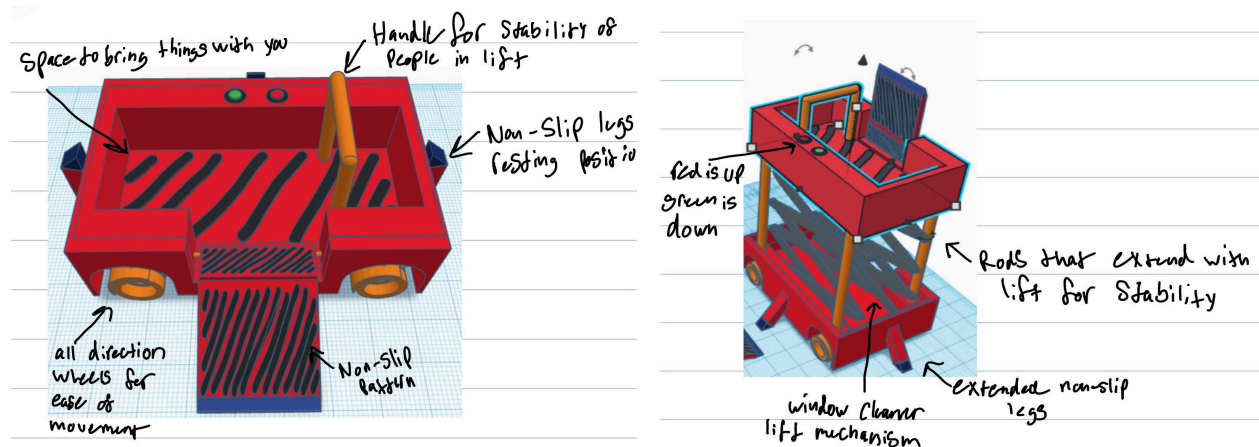
Some children struggle to get their elderly loved ones down from ladders because they constantly think, due to their agile minds, that they're younger than they are. Parallel to this situation, disabled people who forget their capabilities aren't what they used to be can find themselves caught doing something they would have before their disability manifested. Whether it's reaching a high storage cupboard or fixing something around the house, people cherish their independence, and some will accept the risk and climb a ladder even when they shouldn't. The children and grandchildren of the elderly have to take ladders away from older people or even hide them to prevent accidents. There are hundreds of Redditors asking how to prevent their parents from climbing ladders. Elderly people respond, often expressing a desire to have agency over their actions.

My grandma talked with me as I helped her put her Christmas tree into storage above the car in the garage. She always says realizing your body just won't do the things it used to is harsh.

She said she used to do these things so easily but was thankful that she had family close by to help out. Thankfully, she came to terms with her new reality, but she still tries to do little things alone before asking for help.

If you can't stop willful people from using ladders to access high places, how do you keep them safe? How do you give these very active and thoughtful humans assistance and agency without them feeling patronized? Solutions range from non-slip four-step ladders to one-step ladders, all designed to prevent them from climbing too high off the ground. The problem here is that some will always attempt to reach those same heights with a regular ladder because the other one is just too short. They may even resort to standing on chairs and tables, which defeats the purpose of getting the smaller step ladder in the first place. Some people simply don't want to stop, but how can you watch your loved one knowingly put themselves at risk? How do you help people who have been permanently injured feel like they still have control over their lives in small ways? How do you access high places if ladders seem too dangerous, even for able-bodied individuals?

For those who are too stubborn to accept their new situations or who push through their inability to do things, I propose a product inspired by safety ladders and window cleaning lifts. It's a domesticated lift small enough to fit a person and some objects or two people.



Featuring non-slip padding across the ramp and standing area, a handle common on most elderly-safe ladders, and non-slip legs when ready to raise into the air, this lift accommodates people in wheelchairs as well. Hold the raise or lower button to ascend and descend correspondingly. While it would be ideal to make it lightweight, I opted for an actual version with an outside and inside option. The inside version is smaller (space for one person with some room to spare) and lighter with a max weight of 350 lbs, making it easier to move with four-directional wheels. Its max height is about 8 feet which is 2 feet less than the average in-house room ceiling. The outside version reaches the middle of a typical two-story house roof (25') at maximum. The maximum weight capacity is 500 lbs. Caution is still required, but going up and down is much less hazardous. The danger of height remains, but the risk for older persons using this lift should be more acceptable. I added the handle with people with disabilities in mind, similar to a one-step stool often having a large handle to grab onto. Ideally, this should make the machine easier for them to use. With this device brings some agency back into the everyday motions of a loved one's life, because, behind the risks they take that's all they might want.