

# Virginia Tech "Elizabeth and Stan" Team Solution Z-Minder

Z-Minder is a smartphone which slides open diagonally, affording an intuitive action and easier grip in opening and closing. The simplified keypad offers two outer buttons for selection, a middle button for sound, and red lights for alerts. A slot in the case offers an attachment point for keys or a lanyard, enhancing both grip and access. Z-Minder is designed for induction charging through a "bowl" where the device can be conveniently and conspicuously placed.

Z-MINDER comes with a website enabling the user to wirelessly update information such as bills, events, and medications. The website also allows family members to add reminders and modify device settings, relieving Elizabeth and Stan of these chores. Z-Minder's GPS tracking helps Stan and Elizabeth navigate, while also helping the family locate them.

## Persona Elizabeth & Stan:

Elizabeth is 84 years old, and her husband Stan is 87. Both struggle with deteriorating vision, hearing, and mobility as they age. Two years ago, their children convinced them to move to an apartment close by, to make it easier for the family to get together and to help manage daily living, complex medications, and increasing visits to doctors and therapists. The family also convinced Elizabeth and Stan to carry "Jitterbug" cell phones, so everyone could stay in touch anytime, wherever they are. Now the family is urging Elizabeth and Stan to upgrade to smartphones, citing advantages of Facebook access and text messaging to keep up with the grandchildren.

Even more important to the family, though, is using smartphones as reminders for medications, appointments, paying bills, and keeping their complex medical histories up to date and handy. Elizabeth and Stan admit that all of these tasks are becoming difficult for them, but they're just now getting used to their Jitterbug phones. They feel that their everyday lives are complicated enough without introducing even more complicated technology.

The challenges that Elizabeth and Stan face in using wireless technology are shared by many elders, including some still in the workforce as part-time workers or volunteers. These customers favor technologies that emphasize their abilities, not their limitations. Some opt for high-end smartphones for just this reason. But without the life experience with wireless technologies that younger users enjoy, these customers struggle to understand and take advantage of the capabilities of these devices. Searching for help, they find product manuals and technical support staff of carriers and manufacturers are instead additional sources of frustration.



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