

September 1, 2022

Dear Participants,

The Fairfax Area 50+ Technology Committee is proud to offer the 7th Annual “Shark Tank” Technology Challenge open to all students in Fairfax County, Fairfax City, and the City of Falls Church to develop an innovative device or app that will have a positive impact in the lives of older adults, adults with disabilities, or caregivers. Our sponsor, IntegrityOne Partners, will provide cash prizes to the winners.

The Shark Tank Challenge Packet includes all of the necessary information and all the essential forms. It is available to download from our website: <https://www.fairfaxcounty.gov/familyservices/older-adults/fairfax-area-student-shark-tank-technology-challenge>.

This year the committee is particularly interested in projects that may enhance the independent enjoyment of life for older adults and adults with disabilities, including wounded warriors. **Successful projects are innovative either in that it is not currently found in the marketplace or it improves a product currently available.**

You may wish to view the video produced by Fairfax County Public Schools of the “Shark Tank” judging event featuring students who have participated: https://youtu.be/WvZZ_OzLZW4

All information is available on our website: <https://www.fairfaxcounty.gov/familyservices/older-adults/fairfax-area-student-shark-tank-technology-challenge>

The challenge process is outlined below. The final project submission form assumes that the project has been completed and tested at time of submission. It is highly recommended that students test their ideas and finished project with their target audience. The 50+ Technology Committee can assist in finding places to conduct product testing with seniors and/or adults with disabilities. Project submissions are initially reviewed by a judging panel and finalists will be invited to pitch their product at our “Shark Tank” event in the spring. Winners will be notified at the conclusion of the “Shark Tank” event.

2022-2023 Contest Timeline

- Initial Proposal Due (required): Monday, December 12, 2022
- Full Project Submission Due (required): Tuesday, February 21, 2023
- Shark Tank Event: March/April 2023 (date to be determined)

Sincerely,
Tara Turner, Director
Fairfax Area Agency on Aging
Email: TechChallenge@fairfaxcounty.gov

2022-2023 Fairfax Area High School Student "Shark Tank" Technology Challenge Overview

The Fairfax Area 50 + Technology Committee is issuing a challenge to high school students in Fairfax County, Fairfax City, and the City of Falls Church to develop an innovative device or app that will have a positive impact in lives of older adults and adults with disabilities.

The Challenge:

Many older adults and adults with disabilities struggle every day to live comfortably in this ever-changing world – a world that is often not designed to accommodate their highly specialized needs. The widely watched televised version of Shark Tank is a platform for inventors of all ages to submit innovative, marketable product ideas that will successfully cater to today's popular culture. This contest opportunity seeks young innovators who will take up the challenge of designing practical products and applications that older adults and adults with disabilities can independently operate to make the world more user-friendly.

This year the committee is particularly interested in innovative (completely new or improves on an existing technology) projects that may enhance the independent enjoyment of life for older adults and adults with disabilities, including wounded warriors. The committee encourages students to consider projects that may offer assistance in such areas as:

- Active free time activities
- Participation in the arts
- Caregiving

Students are encouraged to be innovative and creative – successful projects are not based on stereotypes. Potential projects may be either a mobile app, web service, robotic, assistive device or any combination. The project should seek to address a need in at least one of the categories listed below (but not limited to the suggestions listed in each category):

- **Health and Recreation:** Promote "healthy aging/lifestyle," eg., encourage physical activity, active participation in recreation and leisure activities, cooking, monitor health status, mobility.
- **Safety:** Enhance physical safety, eg., address fall risk concerns, communicate with caregivers/family/friends, food safety, monitor health risks.
- **Caregiving:** Support family caregivers in managing their caregiving role, eg., monitoring older adult health status, medication management, nutritional status, and/or facilitate remote communication.

Having a means to take care of everyday needs at home or the community is only the beginning. They, just like you, may also want to create, paint, play cards, play sports, communicate with friends/family near and far.

Successful projects are not based on stereotypes but show innovation and a true understanding of the need identified. Students are encouraged to visit senior centers, adult day health care centers and to talk to family members, caregivers, older adults and those with disabilities. It is essential to observe the real-life problems these individuals face every day in their homes and in their communities and then to explore the endless possibilities of real-life solutions.

Contest Details:

Finalists will be selected to present their product to a "Shark Tank" panel. Panelists will consist of experts from the fields of education, technology, aging and health care. The winning projects will receive a cash prize and the projects may be considered for potential development. All Finalists in each category will be given an opportunity to demonstrate their products in the spring of 2023.

The innovation will be judged on the following merits:

1. Maximizes independent use by the older adult and/or the person with disabilities, minimizes the need for coaching
2. Simplicity of design and use, non-threatening and easy to understand and use.
3. Meets the need and enhances the quality of life.
4. Demonstrates an understanding of the challenges faced by older adults and/or people with disabilities using technology.
5. Demonstrates evidence of market demand, including what, if any, is currently available to meet the need.
6. Demonstrates positive impact on the lives of those with disabilities and/or older adults.

TIP: Finalists chosen to go into the "Shark Tank" should be prepared to not only demonstrate how the innovation meets each of the 6 merits listed above, but also to document what research was performed, pilot- testing done, and the impact on the audience for which the innovation is intended.

How to Enter:

STEP 1:

View and/or download the **"Shark Tank" Challenge Packet** This packet contains all the essential information needed to be successful in developing and submitting a project.

STEP 2:

Complete and submit **Initial Project Proposal Form** by **Monday, December 12, 2022**. The proposal form found in the Challenge Packet requires only a basic project overview and does not require the project be completed. The Initial Project Proposal Form may be emailed to TechChallenge@fairfaxcounty.gov

STEP 3:

The **Final Project Submission Form** found in the Challenge Packet must be returned to us by Tuesday, February 21, 2023. The project submission form assumes that the project has been

completed and tested at time of submission. It is highly recommended that you test your ideas and finished project with your target audience. The completed Final Project Submission Form may be emailed to TechChallenge@fairfaxcounty.gov.

Include on the Final Project Submission Form:

1. Project Summary (approximately 3-4 pages) – completed on the Final Project Submission form.
2. Video, 3-5 minutes in duration, describing project and how to use. Use only original graphic and audio/video components. Include on the Final Project Submission form as a link.
3. Video, 3–5 minutes in duration, demonstrating successful use by the target audience. Use only original graphic and audio/video components. Include on the Final Project Submission form as a link.
4. Actual software or link to software, if possible.

Contact Information and Resources:

- If you are running into barriers preventing you from participating or completing your project, please contact us at TechChallenge@fairfaxcounty.gov
- **Tech Challenge Resources** page of the “Shark Tank” Challenge Packet will support you in the development of your project. We may be able to assist with equipment challenges, technical questions, access to older adults and caregivers and/or background information (e.g., how Parkinson’s disease affects mobility). For additional questions or assistance, you send a question to TechChallenge@fairfaxcounty.gov.

For additional information or questions, interested students and teachers may email the 50+ Technology Committee at TechChallenge@fairfaxcounty.gov.

It is **highly recommended** that you test your ideas and finished project with your target audience. For assistance in locating prospective target audiences, please consult the **Tech Challenge Resources** page of the “Shark Tank” Challenge Packet or contact us at TechChallenge@fairfaxcounty.gov.

- *Optional:* Have you checked out filing a provisional patent application with the U.S. Patent and Trademark Office before submitting your innovation to this challenge?

The Tech Challenge is an initiative of the Fairfax 50+ Community Action Plan which was passed by the Fairfax County Board of Supervisors in 2014.

The Tech Challenge also supports the Fairfax County's Economic Success Plan that seeks to grow and diversify the economy through innovation, social equity and expanding science, technology, engineering and math education.

Go to the Fairfax County's Older Adults Page, www.fairfaxcounty.gov/OlderAdults, to find services, recreational activities and community engagement opportunities for older adults.

Tech Challenge Resources: How Can We Help You?

Contact information for the challenge:

- Email: techchallenge@fairfaxcounty.gov

Get help and education on older adults &/or adults with disabilities or caregiver needs, services, etc.

- **Fairfax County Services for Older Adults**

<http://www.fairfaxcounty.gov/dfs/olderadultservices/>

Find information about the full range of services and activities for older adults.

- **Disability and Services Planning Development**

<http://www.fairfaxcounty.gov/dfs/disabilities/assistive-tech.htm>

Find more information about assistive technology and local resources.

- **Family Caregiver Alliance**

<https://caregiver.org/>

Educate yourself about the needs of family caregivers.

- **National Institute on Aging at the National Institutes of Health**

<http://www.nia.nih.gov/>

The National Institute on Aging, one of the 27 institutes and centers of NIH, is a leader in research to understand the nature of aging and extending active life. This website offers resources on the latest research in the field of aging, information on the health and safety of older adults, publications, clinical research.

Get help with project design &/or presentation skills, mentoring

- **Contact us**

Email: techchallenge@fairfaxcounty.gov

Get help with research on medical topics

- **Inova Fairfax Medical Library**

Library@inova.org

A complete medical library staffed with medical librarians available to assist you in your research. Located at the Inova Fairfax Hospital Email to schedule an appointment or request assistance.

Get help and education on disability issues/concerns

- **Northern Virginia Resource Center for the Deaf and Hard of Hearing (NVRC)**

<http://www.nvrc.org/>

Center has an Assistive Technology Demonstration Center featuring devices on display that are designed to enhance quality of life for persons with hearing loss. A Resource and Technology Specialist can explain and demonstrate different devices, approximate costs, and provide options regarding vendors available. Devices include assistive listening devices, flashing lights, variety of phones, and other alerting devices.

- **ServiceSource Assistive Technology Lab**

<https://www.servicesource.org>

ServiceSource is a non-profit which offers support services to those with disabilities, their families and caregivers

- **Virginia Department of the Blind and Visually Impaired**
<http://www.vdbvi.org/>
 Provides services and resources that empower Virginians who are blind, vision impaired or deafblind to achieve their desired levels of employment, education, and personal independence.
- **Fairfax County Public Library, Access Services Branch** <http://www.fairfaxcounty.gov/library/branches/as/>
 The Access Services branch removes barriers to library services for people with disabilities. Services include: providing opportunities to learn about assistive technology and equipment and providing books in alternative formats to people with vision impairments.
- **Disability and Services Planning Development**
<http://www.fairfaxcounty.gov/dfs/disabilities/assistive-tech.htm>
 Find more information about assistive technology and local resources.

Do you need a place to pilot test your project?

- **Neighborhood and Community Services-SENIOR CENTERS**
http://www.fairfaxcounty.gov/ncs/facloc_sr.htm
- **Neighborhood and Community Services – AFTER SCHOOL TECHNOLOGY CENTERS**
http://www.fairfaxcounty.gov/ncs/facloc_cch.htm
 Robert O’Quinn roquin@fairfaxcounty.gov
- **Contact us**
 Email: techchallenge@fairfaxcounty.gov

Get help to beat any barriers – technical assistance links:

- **Neighborhood and Community Services- After School Technology Centers**
http://www.fairfaxcounty.gov/ncs/facloc_cch.htm
 Contact: Robert O’Quinn, roquin@fairfaxcounty.gov

Plan Your “Shark Tank” Pitch

This document serves as a resource to help finalists plan for their “Shark Tank” presentations. This “Shark Tank” Pitch Planning Guide is based on the Pitch Canvas, a recognized format for conducting business pitches. This document is not required but could be a useful tool. Please also review the 2022 “Shark Tank” Event Presentation Guide.

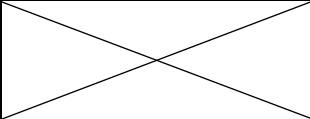
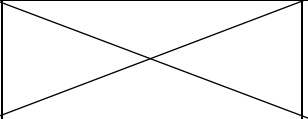
<p>Simple statement of what change you and your product are making in the world</p> <p>A memorable one-sentence explanation of what impact your product will have.</p>	
<p>Pain (+ Gain)</p> <ul style="list-style-type: none"> • What problem are you trying to solve? • What opportunities do you provide for people to be faster, more connected, more efficient, happier, safer,..? 	<p>Product</p> <ul style="list-style-type: none"> • As simple as possible: what does your product do for customers? • How does it work? • How have you tested it with customers? • Be sure not to let the product dominate the pitch.
<p>Product Demo</p> <ul style="list-style-type: none"> • Live demo? (always risky, but powerful if it works...) • Or screenshots? Physical product? • Can you show a real customer using it? 	<p>What’s Unique</p> <ul style="list-style-type: none"> • Technology/Relationships/Partnerships • How do you help your customers get results differently from your competition or alternatives?
<p>User Feedback</p> <ul style="list-style-type: none"> • Who has tried the product? • What did they think? • How can the product be modified based on their feedback? 	<p>Future Plans</p> <ul style="list-style-type: none"> • What are next steps? • How could you grow/modify/change product? • What could you do with additional funding?
<p>End statement with call to action</p> <p>Finish the pitch with a clear request from the audience to take action!</p>	
<p>Why You?</p> <p><i>Note: Can be presented in any part of the pitch</i></p> <ul style="list-style-type: none"> • Why do you care about solving this problem for your customers? <ul style="list-style-type: none"> • How has your life been affected by this issue (if applicable)? • Why should your audience get involved with you? 	

2022-2023 Shark Tank Event Presentation Guide

	Boring Presentation	OK Presentation	Great Presentation
Focus	Loses focus more than once. Does not manage time effectively. No logical sequence of information.	Follows logical sequence but structure could be better. May need more elaboration on one or more points. Adequate time management, but could be stronger.	Catches audience's interest. Follows logical sequence, stays focused, good explanations. Effective time management and strong transitions.
Organization	INDIVIDUAL PRESENTATION: No opening and/or closing statements or irrelevant opening/closing statements. PART OF GROUP PRESENTATION: Poor or no acknowledgement of previous speaker and previous speaker's content. Poor or no set up/hand off to next speaker.	INDIVIDUAL PRESENTATION: Offers some type of opening and closing statements. PART OF GROUP PRESENTATION: Fair attempt to acknowledge previous speaker and weave comments into logical following sequence. Provides some brief introduction of next speaker and topic.	INDIVIDUAL PRESENTATION: Clear opening and closing statements. PART OF GROUP PRESENTATION: Strong integration of where previous speaker left off and initial comments. Strong set up/hand off to next speaker.
Voice Quality & Pace	Mumbles, mispronounces words, grammatical errors, "umms". Difficult to understand. Speaks too quietly or too loudly. Speaks too fast or too slow. Loses train of thought, tentative. Lacks enthusiasm. Mechanistic	Easily understood. Speaks loud enough to be heard and at appropriate pace. Some awkward pauses or halting delivery but mostly clear and natural.	Enthusiastic and engaging. Speaks clearly and loudly enough at a comfortable pace. Exudes confidence and interest. No grammatical or pronunciation errors. Presentation appears conversational, extemporaneous, and natural.
Mannerisms & Body Language	Demonstrates distracting mannerisms which may include bad posture, shifting feet, too much or too little hand movement. Body language reveals reluctance to interact with audience. Seems fearful/very nervous.	No significantly distracting mannerisms. Acceptable posture. Body language mostly demonstrates comfort in interacting with audience but occasional instances of discomfort may be communicated. Seems natural for the most part.	Body language used effectively to maintain audience's interest. Body language reflects presenter's reaction to, and empathy with, the audience. Gestures match verbal content, are comfortable and relaxed, seem spontaneous.
Professionalism & Appearance	Does not meet minimum requirements for business dress. Makes excuses for aspects of the presentation. Inappropriate word choice for audience. Inappropriately informal.	Meets minimum standards for business dress and appearance. Generally treats audience professionally, acceptable word choice (no slang). May seem to lack confidence at times. Reasonably credible.	Dressed appropriately. Appearance engenders respect and credibility. Treats audience professionally. Speaker appears confident and has good command of the topic.
Rapport with Audience & Use of Media	Does not connect with audience. Little to no eye contact. Reads. Relies heavily on slides and/or notes. Attempts to cover too many slides or lingers too long on too few slides.	Tries to maintain eye contact most of the time but instances may be fleeting in length. Scans the room. Some reliance on notes or slides.	Genuinely connects with audience. Maintains eye contact. Visuals (slides, etc.) effortlessly enhance speech.

Credits: This document borrows from the SPEAKS Rubric from CSU-Fullerton Business Communication Program and the CSU-Chico, College of Business Oral Communication Rubric.

2022-2023 “Shark Tank” Initial Panel Review Rubric

Category \ Score	1	2	3	4	5
Knowledge & Understanding <ul style="list-style-type: none"> - Identifies the problem & audience - Demonstrates understanding of challenges faced - Meets a need & enhances quality of life 	Little or no identification of problem/need; Little or no demonstration of understanding, knowledge, or impact of problem	Some knowledge &/or understanding of problem/challenge Superficial demonstration of impact of problem	Adequate knowledge & understanding of problem/challenges faced by audience Adequate demonstration of the impact of problem	Very good knowledge & understanding of problem identified & implications of the impact on the quality of life	Excellent knowledge & understanding of the problem and its impact on the need & quality of life of the target audience
Design Thinking <ul style="list-style-type: none"> - Simplicity of design & use - Maximizes independent use - Demonstrates a positive impact - Demonstrates research 	Superfluous attempt to address design criteria	Some attempt to address design criteria	Adequate demonstration of how the design meets the criteria	Very good integration of design criteria in a logical manner	Effective integration of design criteria Excellent presentation of impact of design to accomplish goal
Testing <ul style="list-style-type: none"> - Demonstrates methodology & sample size - Demonstrates impact of data collected 	Superficial testing Little or no evidence of sample size No demonstration of use of data (0-1 people tested product)	Some testing Some evidence of sample size Limited attempt to use data to impact design (2-3 people tested product)	Adequate evidence of testing & sample size Some attempt to demonstrate use of data on design (3-5 people tested product)	Strong, clear & appropriate testing Appropriate sample size Clear demonstration of impact of data on design (5-10 people tested product)	Compelling evidence of testing & sample size Compelling demonstration of impact of data on design (10+ people tested product)
Market Demand <ul style="list-style-type: none"> - What are the benefits - What makes the product unique & innovative - Analysis of cost (time & money) vs benefit 	Little or no evidence of benefits, uniqueness, or cost/benefit analysis	Superficial evidence of benefits Limited cost/benefit analysis	Adequate evidence of benefit Adequate cost/benefit analysis	Good evidence of benefits, uniqueness & innovation Good cost/benefit analysis	Compelling evidence of benefits, uniqueness & innovation Compelling analysis of cost vs. benefit
Presentation <ul style="list-style-type: none"> - Clear, logical, relevant - Engages the audience 	Not understandable, no sequence of information, not engaging		Some attempt at logical sequencing & relevance Somewhat engaging		Info presented in a logical & interesting sequence

Guidance for Fairfax “Shark Tank” Judges

The following is intended to provide a framework within which to judge the student projects. Please feel free to ask your own questions. If you have not seen a Shark Tank episode, please consider watching one to familiarize yourself with the environment of the “tank” including tone, flow, discussion, questioning, etc. Thank you for agreeing to be a judge. It should be a very enjoyable experience for both you and the contestants.

The product/innovation will be judged on the following merits:

1. Maximizes independent use by the older adult/adult with disabilities, minimizes need for coaching
2. Simplicity of design and use, non-threatening and easy to understand and use.
3. Meets the objectives of the category.
4. Demonstrates an understanding of the challenges faced by older adults/adults with disabilities using technology.
5. Demonstrates evidence of market demand.
6. Demonstrates positive impact on the lives of older adults/adults with disabilities.

The product/innovation should seek to address a need in at least one of the following categories:

1. Health and Recreation: Promote healthy aging, i.e., encourage physical activity, continued engagement in recreation and leisure activities, good nutrition, monitor health status, provide intellectual stimulation, chronic disease self- management, mobility.
2. Safety: Enhance physical safety, i.e., address fall risk concerns, communicate with caregivers/family/friends, food safety, monitor health risks.
3. Caregiving: Support family caregivers in managing their caregiving role.

Suggested range of contestant questions:

1. Mission: What were you trying to accomplish?
 - a. What need/problem was identified and how was it identified?
 - b. What is the target audience – age, living environment?
 - c. What benefit does this product/innovation offer?
2. Inspiration/Motivation
 - a. Why was this need/problem chosen?
 - b. What research was performed to identify issue/identify solution?
 - c. What makes this product unique?
3. Marketability
 - a. How do you know this product fulfills its mission?
 - b. How was it tested?
 - c. How many people tested it?
 - d. What adaptations were made to the product based on the results of testing?
 - e. What is the data to support the above?
4. Cost/feasibility
 - a. How was the product built?
 - b. What tools – equipment, software, expertise – are needed?
 - c. What is/was the cost to produce?

Additional considerations:

1. Is this product worthy of further development? By whom?
2. What advice can be provided to the contestant in terms of further testing, development?

**2022-2023 Fairfax Area Student
Shark Tank Technology Challenge
Initial Project Proposal Form**
(Submit by Monday, December 12, 2022)



Please fill in ALL fields for your Project Proposal Form to be considered.

Contact Student Name: _____

Contact Student Home Address: _____

Parent/Guardian/Teacher or Adult Sponsor Name: _____

Parent/Guardian/Teacher or Adult Sponsor Phone Number or Email: _____

School Attending: _____

OR

Home-Schooled

Contact Information E-mail: _____

Contact Information Phone Number: _____

You will be considered the main contact person for this team.

Is this a team project? Yes No If yes, name team members:

Name	Email	School

I certify that all team members live or attend school in Fairfax County or the City of Falls Church or Fairfax City.

Please choose the categories that apply to your innovation (Check all that apply):

(Must select at least one)

- Health & Recreation
- Safety
- Caregiving

My project will be (Check all that apply):

(Must select at least one)

- An App
- Web Software Program
- Robotic
- Assistive device

Please briefly describe your project as you envision it. It is understood that the initial vision may change. What need do you intend to meet? (50 words or less)

I have access to individuals to conduct product testing. If you DO NOT have access to individuals for product testing visit the [Tech Challenge Resource](#) page for help

All projects must comply with the following Content Restrictions/Honor Code:

- The project must not contain material that violates or infringes another’s rights, including but not limited to privacy, publicity, copyright, trademark, patent, or intellectual property- or property-related rights.
- The project must not contain footage, images or artwork not created by Applicant unless Applicant has obtained all rights necessary to include such footage, images or artwork as part of the project.
- The project must not contain material that is unlawful, in violation of or contrary to the laws or regulations in any jurisdiction where the project is created.

By checking this box you and your team members are bound by the provided Honor Code.

Please note: You might also wish to protect your product by filing a provisional patent application with the U.S. Patent and Trademark Office *before* submitting your innovation to this contest. Information about provisional patent applications can be found at www.uspto.gov.

If you have completed ALL information fields, please save this form and email it as an attachment to techchallenge@fairfaxcounty.gov.

Thank you for your interest in this challenge. We look forward to receiving your completed project. Please check out the submission requirements, important dates, and resources available to you on our website at <https://bit.ly/fxc-tech-challenge>.

2022 - 2023 Fairfax Area Student
Shark Tank Technology Challenge
Final Project Submission Form
(Submit by Tuesday, February 21, 2023)



Please download and save this form. Upon completion, email the submission form to techchallenge@fairfaxcounty.gov.

Individual or Team Names: _____

Email Address(es): _____

School Attending: _____

OR Home-Schooled

Name of Product (device or app): _____

Categories that apply to your innovation (check all that apply):

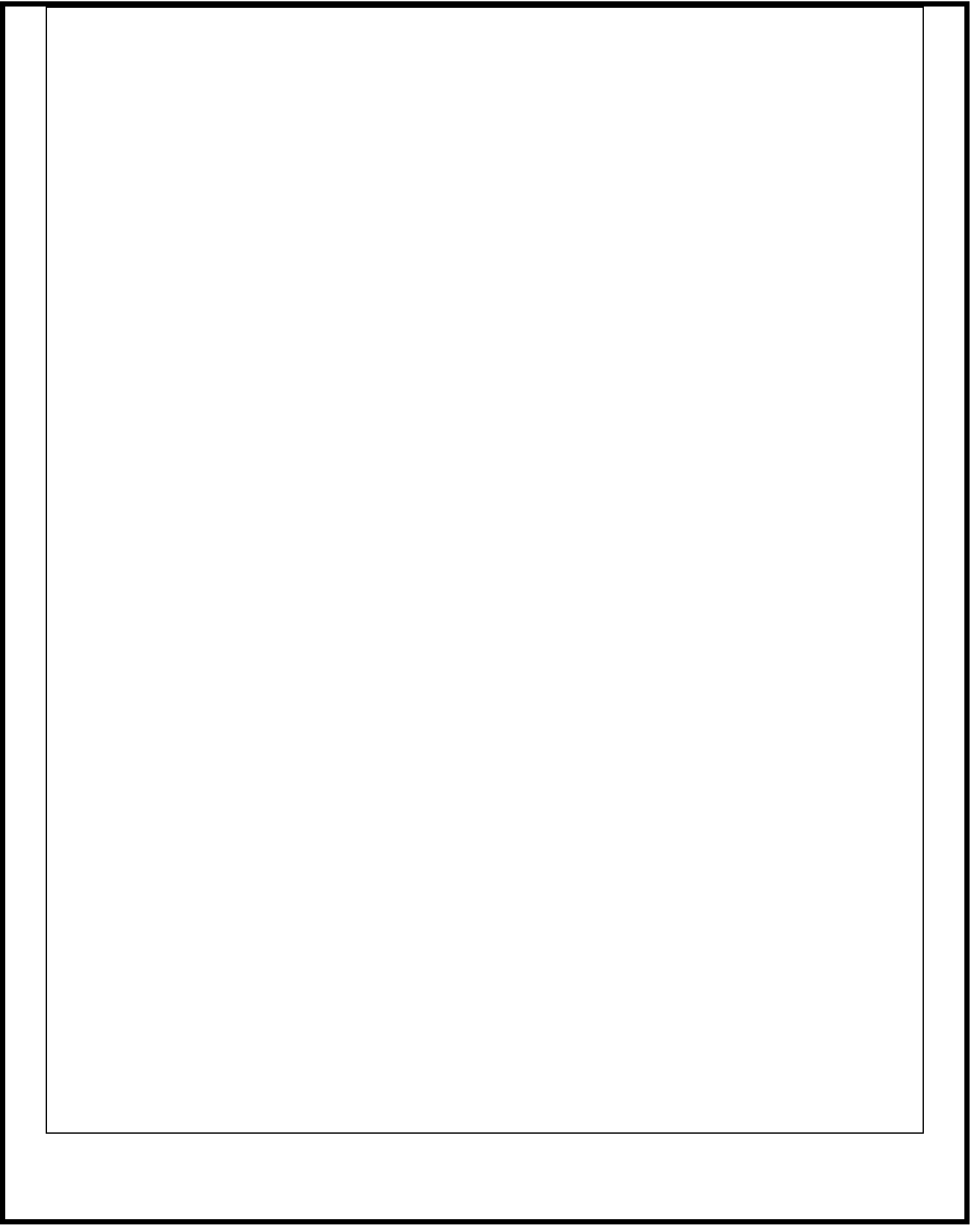
- Health & Recreation
- Safety
- Caregiving

I (We) have reviewed the Initial Review Rubric and Shark Tank Judging Criteria prior to submission.

I (We) acknowledge that any and all submitted materials are original works.

(1) Provide written Project Summary in the text box on page 2 (using Arial Font Size 11) and address ALL of the following: (responses should reflect a double-spaced, 3-4 page written paper).

- a. What is the project's purpose and function? (Will be used as "official" project summary for Shark Tank event?)
- b. What specific need(s) does it address for target audience? (May include research with citations as necessary?)
- c. How does it compare to others on the market? (Are there any competitors?)
- d. What's special or unique about your product? (How is it innovative?)
- e. How has your product been designed for usability and accessibility? (What makes it easy to use, usable by many people including those with limitations, safety considerations?)
- f. What inspired you to build it? (Did you consult your target audience)
- g. How was your product tested? (It is highly recommended that you test your ideas and finished project with your target audience.)
 - i. How many people tried it?
 - ii. What were the comments?
 - iii. How did you document your results?
(Documentation will be needed for "Shark Tank" Event)
 - iv. How did/could the results affect your product design?



(2) Video Walk-Through of your product: a step-by-step demonstration showing how to use it and what it can do. (3-5 minutes)

Upload the video to YouTube and provide the link to the video: _____

(3) Video showing product being used independently by older adults or family caregivers. (3-5 minutes)

Upload the video to YouTube and provide the link to the video: _____

Please provide link to software, if possible. _____