



2019 — 2020 STUDENT GUIDE

CONRAD
CHALLENGE



A FUTURE BUILT ON A LEGACY

TODAY, THE CONRAD FOUNDATION IS THE ONLY ORGANIZATION OF ITS KIND WHOSE PROGRAMS COMBINE SCIENCE AND TECHNOLOGY-BASED EDUCATION, INNOVATION AND ENTREPRENEURSHIP TO INSPIRE SOLUTIONS FOR ACHIEVING GLOBAL SUSTAINABILITY.

The Conrad Foundation honors the legacy of Apollo 12 astronaut, Charles “Pete” Conrad, Jr., and his four-decade passion for innovation and entrepreneurship. Pete spent 20 years as a U.S. Navy test pilot and NASA astronaut. In November 1969, he became the third man to walk on the Moon. After many years as an aerospace explorer, Pete’s entrepreneurial spirit took flight. He founded four companies devoted to the commercialization of space travel. Unfortunately, Pete’s pursuits were cut short with his passing in 1999.

Pete’s wife, Nancy Conrad, shared his passion for inspiring future explorers. After his passing, Nancy wanted to keep Pete’s spirit for innovation and entrepreneurship alive while targeting the next generation of explorers. As a result, this former high school teacher launched the Conrad Foundation in 2008 with its flagship program, the Conrad Challenge. Since then, she has become a recognized leader in transformative education, testifying before Congress and speaking at global conferences. She is dedicated to energizing and engaging students in STEM fields through unique entrepreneurial opportunities.

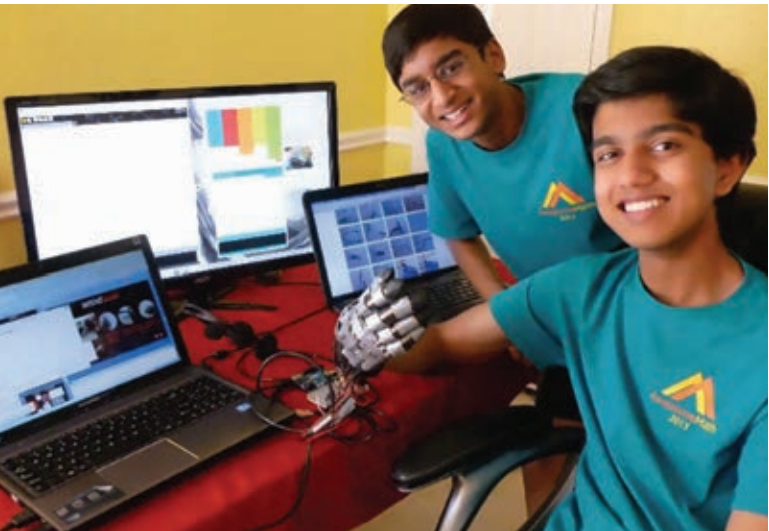


EMPOWERING STUDENTS TO CHANGE THE WORLD

WHEN IT COMES TO INNOVATION, WHO NEEDS A BOX? It is commonly believed there are two fundamental ways to think: inside the box and outside the box. At the Conrad Challenge, we encourage students to enjoy the freedom of thinking like there is no box.

The Conrad Challenge is an annual, virtual, innovation and entrepreneurial competition that encourages participants (young adults, ages 13-18) to change the world. Each year, teams of 2-5 students from around the world create products and/or services that address some of the most pressing global challenges. You are able to take direct control of your learning experience extending well beyond the bounds of the school day. Leave the title of “student” and become entrepreneurial problem-solvers, addressing social, scientific and societal issues through creativity and critical thinking.

Students, teachers, experts and sponsors all agree... the Conrad Challenge is unlike any STEM competition out there. This isn't a science fair. It's an innovation competition that is creating the next generation of entrepreneurs who are going to change the world... and that's YOU!



CONRAD CHALLENGE OVERVIEW

REGISTRATION AND ROUND 1: THE INVESTOR PITCH — SUBMISSION DEADLINE NOVEMBER 1, 2019

With this virtual competition, students are encouraged to step out of their comfort zones and collaborate without classroom, state or country borders. Researching global issues within the Challenge categories and determining where they can influence change, students complete two simple steps to begin their innovation journey: 1) register their team, and 2) develop an Investor Pitch to explain their product/service concept and how it creates a solution to a real-world challenge.

ROUND 2: THE BUSINESS PLAN — UPON ACCEPTANCE EMAIL — JANUARY 3, 2020

Teams develop a strategic business plan to support their product/service. Within this round, teams collaborate and use their critical-thinking skills to present a business prospectus, technical concept report and graphic representation of their solution.

All team Business Plans are scored by top professionals in industry, government, research and academia. Students who complete this round will be recognized as Conrad Innovators. These students will be invited to join the Conrad Alumni Network and are encouraged to share this distinction on their college applications. The top five teams in each category advance to the final round of the competition.

ROUND 3: CONRAD INNOVATION SUMMIT — APRIL 21 - 24, 2020

The Conrad Challenge culminates at the Innovation Summit, a four-day experience at the Kennedy Space Center Visitor Complex in Florida. Finalist teams travel to the Space Coast to meet and present their innovations before an esteemed panel of expert judges. Teams are scored and provided on-the-spot feedback from the judging panel, like on the hit TV show “Shark Tank.” The winning teams receive scholarships, patent assistance and business services to fine-tune their concepts to create companies or license their IP to top-tier corporations. This unique event gives students direct exposure to industry experts, corporations, investors and universities.

Another important outcome of the Innovation Summit is the opportunity for participants to meet like-minded students from around the world and build a level of confidence that will benefit them for years to come.

CONTINUED SUPPORT FROM THE CONRAD COMMUNITY

The Conrad Challenge is just the beginning of the Foundation’s engagement with students. Our board, partners, judges and subject matter experts often continue mentoring our students after the competition. Additionally, many of our students return to Summit after graduation to speak to our finalists, and even join Conrad’s Alumni Leadership Council to continue an active role within the Challenge.

STUDENT TEAMS DEVELOP SOLUTIONS TO GLOBAL CHALLENGES WITHIN THE FOLLOWING CATEGORIES:



AEROSPACE & AVIATION

Student solutions have included – improving storage efficiency onboard the International Space Station and warehouses via sustainable RFID technology; an autonomous magnetic take-off and landing system



HEALTH & NUTRITION

Student solutions have included – a cloud-based web and mobile app that generates insights about cancer mutations from biomedical literature; a novel rehabilitative medical device to improve joint health; a nutrition bar used as a meal supplement for astronauts

CYBER-TECHNOLOGY & SECURITY

Student solutions have included – a three-device platform to connect people with high-functioning autism to local businesses that are hiring; a mini Blackbox allowing people to access high-performance computing in difficult operating and/or harsh environments



ENERGY & ENVIRONMENT

Student solutions have included – a low-cost potable water filtration system to help people in underserved areas; an unmanned surface vehicle (USV) to regularly monitor the water quality of lakes and ponds



2019-2020 SPECIAL CATEGORIES

In addition to the four traditional categories, the Foundation partners with various organizations each year to present special categories. This year the Conrad Challenge is addressing two major social and global issues.

In partnership with SMART Technologies, students will take their education into their own hands. The Challenge requires them to implement new technologies, or improve usage of existing ones, to support enhanced educational experiences for students. [LEARN MORE HERE.](#)



In partnership with the Foundation for a Smoke-Free World, students will join the movement to advance global progress to end vaping [LEARN MORE HERE](#) and reduce the impacts of smoking decline on tobacco-dependent economies [LEARN MORE HERE.](#)



[CLICK HERE TO LEARN MORE](#)

JOINING THE CHALLENGE

IT IS ALRIGHT IF YOU ARE NOT ABLE TO ANSWER EVERYTHING AT THE TIME OF REGISTRATION... YOU WILL BE ABLE TO MAKE CHANGES TO YOUR ENTRY UNTIL YOU HIT SUBMIT.

STEP 1: GATHER YOUR TEAM

2-5 team members (ages 13-18)

Recruit a coach (over the age of 18)

Obtain Parent/Guardian consent (for all team members under the age of 18)

- Select a “team captain” - This team member will be the primary user in the system and receive all communications/notifications from the Conrad Challenge via email.
- All team members’ and coaches’ full names and email addresses will be needed to initially register and gain access to the system.

STEP 2: READ STUDENT GUIDE & RULES

It’s important to fully understand the Challenge prior to registering. The Conrad team will also be there to help you every step of the way, offering resources throughout the process.

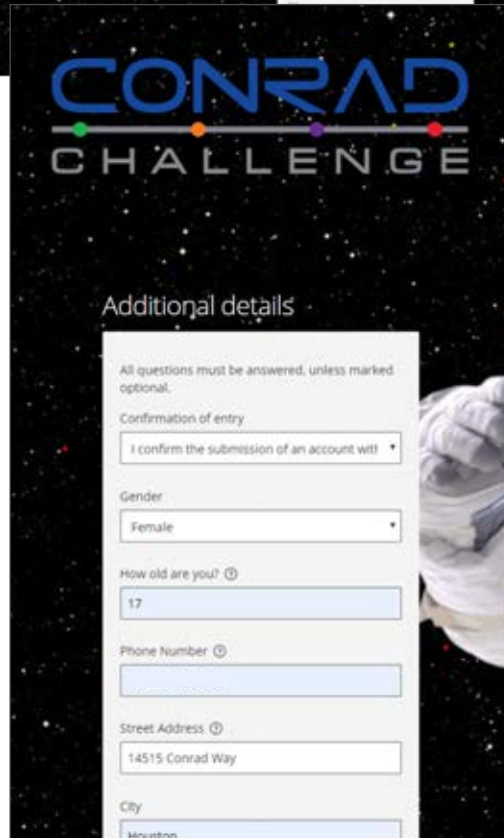
STEP 3: REGISTER YOUR TEAM

ROUND 1: THE INVESTOR PITCH DEADLINE NOV. 1 @ 11:59 P.M. EST

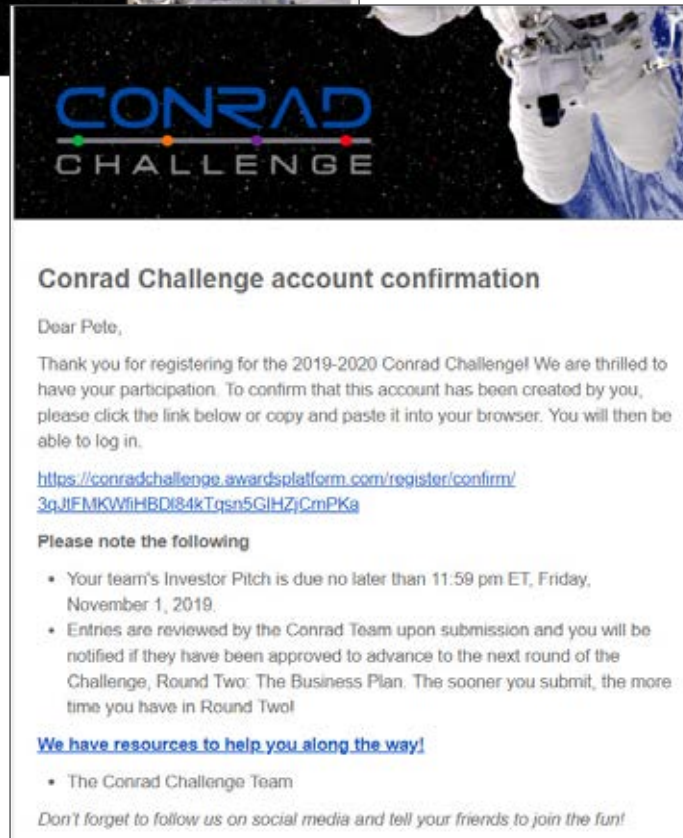
REGISTRATION: WWW.CONRADCHALLENGE.AWARDPLATFORM.COM



The screenshot shows the registration page with a 'Get Started' sidebar on the left containing a list of steps: 1. Register an account, 2. Start your team's entry (once it is approved), 3. Submit your entry for the qualifying round, Round 1: Investor Pitch. The main 'Register' form includes fields for First name, Last name, Email, Password, and Confirm password. There is also a 'Log in' section with fields for Email or mobile ID and Password, and a 'Remember me' checkbox.



The 'Additional details' form includes a confirmation of entry dropdown menu, a gender dropdown menu (set to 'Female'), a text input for 'How old are you?' (set to '17'), a text input for 'Phone Number', a text input for 'Street Address' (set to '14515 Conrad Way'), and a text input for 'City' (set to 'Houston').



The email confirmation page features the Conrad Challenge logo and a message to 'Dear Pete'. It thanks the user for registering and provides a link to confirm the account: <https://conradchallenge.awardsplatform.com/register/confirm/3qJIFMKWfiHBDI84kTqsn5GIHZjCmPKa>. It also includes a 'Please note the following' section with two bullet points: 'Your team's Investor Pitch is due no later than 11:59 pm ET, Friday, November 1, 2019.' and 'Entries are reviewed by the Conrad Team upon submission and you will be notified if they have been approved to advance to the next round of the Challenge, Round Two: The Business Plan. The sooner you submit, the more time you have in Round Two!'. A link to resources is provided: [We have resources to help you along the way!](#). The email concludes with 'The Conrad Challenge Team' and a note: 'Don't forget to follow us on social media and tell your friends to join the fun!'.

1. Team captain (primary user) Registers online and creates new account

These steps are for the team captain only. Other team members will join in the following steps.

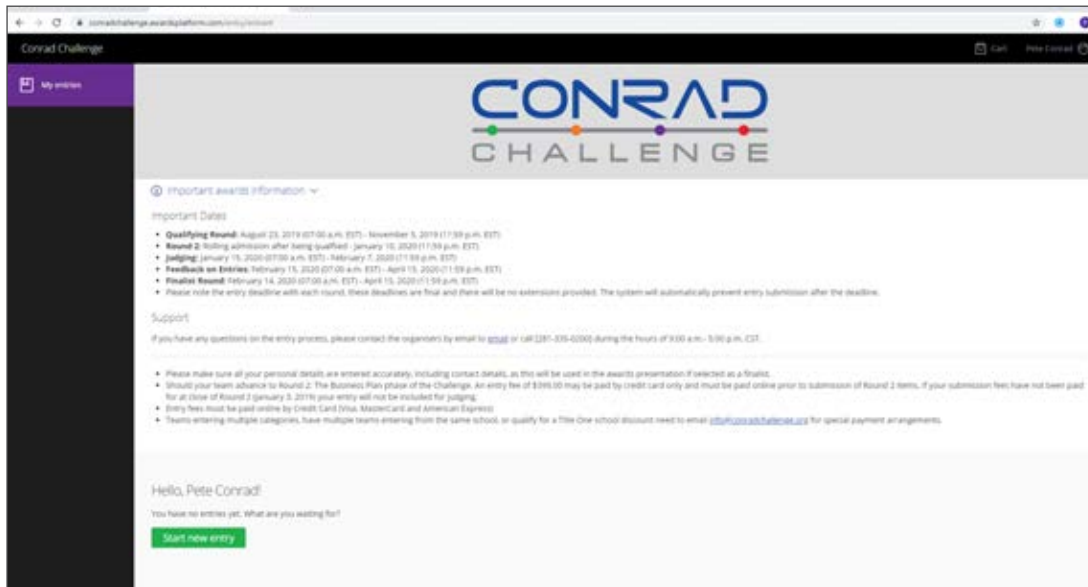
- Complete and submit the registration form.
- A new screen will appear asking for additional details to complete and submit.

Note: All phone numbers need to be inserted as international (+1 xxx-xxx-xxxx for USA)

- If participating in multiple categories, a new account will need to be created with a different team captain. Each team captain in the Conrad system can only be affiliated with one team entry.

2. Team captain (primary user) will receive an email to confirm account

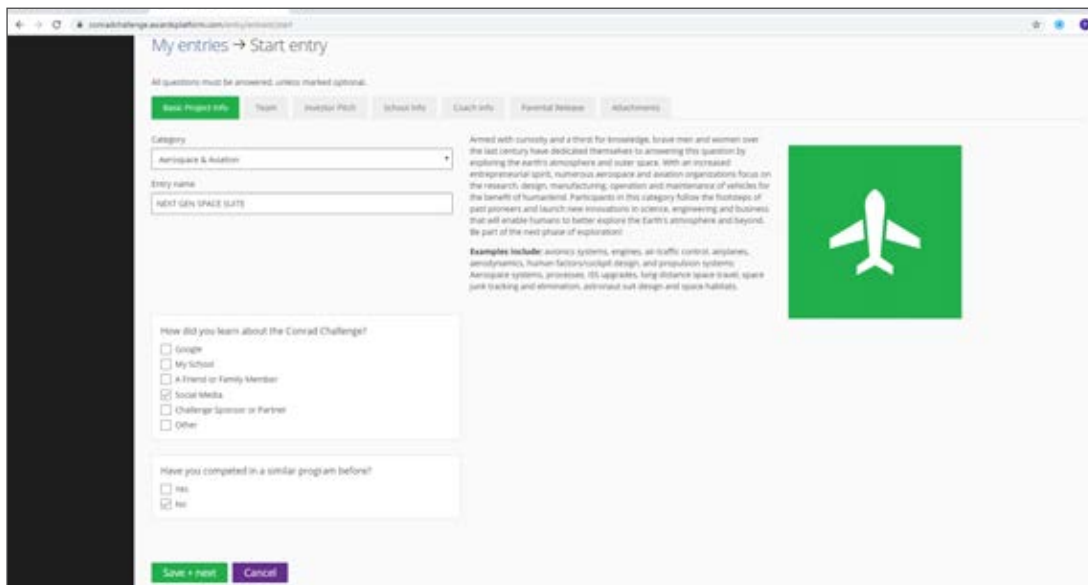
- Click the link within the email to confirm account.



WELCOME TO THE TEAM DASHBOARD!

Once you have confirmed your account, all information will be stored moving forward. This allows your team to edit and update the entry along the way. Continue working through all the following tabs as time permits.

The following steps are completed through the team captain's account, but it is required that all team members collaborate in the investor submission.



BEGIN YOUR SUBMISSION BY CLICKING “START NEW ENTRY”

Basic Project Information

- Again, do not stress... you don't need all of the answers right away... you can edit anytime you want until you hit submit.
- Enter this information to the best of your ability, then click “Save+Next”

General Information

To populate the remainder of the form, where you can add your teammates, please tell us how many people will be working on this project. After entering the name and email address of your teammates, the system will send them an email requesting they finish filling out their profiles to accompany the submission of your project.

Number of team members
1

Team Member 1

Please confirm this team member is aware they have joined the project:
Yes, my teammate is aware they are joining this project

First Name
Name

Last Name
Team

Email Address
team@puzzleschallenge.org

Save + next Save + close Preview Submit entry

Team Information

- Select the correct number of additional team members, not including the team captain (for example, if you are a full team of 5, you would select 4).
- Enter full names and email addresses for all team members.
- Then click “Save+Next” to continue your entry.

My entries → Edit entry

All questions must be answered, unless marked optional.

Basic Project Info Team Inventor Pitch **School Info** Coach Info Parental Release K12/Charters

School Name

School Type

Street Address

City

State ID

Country

School Information

- Enter the team captain’s school information
- **TEAM MEMBERS ARE NOT REQUIRED TO BE FROM THE SAME SCHOOL.** We encourage collaboration, even across countries!
- If your team consists of students from multiple schools, don’t worry. We will gather additional information from all team members in a following step.
- Then click “Save+Next” to continue your entry.

All questions must be answered, unless marked optional.

Basic Project Info | Team | Member Info | School Info | **Coach Info** | Parental Release | Attachments

Coach Information

Important
Please provide contact information for your team's coach. Please note that you will not be able to submit your project without an adult sponsor from your educational institution. If you have not recruited a coach yet, please share our [coach list](#) with your favorite teachers, mentors and fun adults. Most educators are extremely excited to participate - so there is nothing to worry about!

Please confirm, you do have a coach

Yes, we have a coach

First Name

Last Name

Email Address

Phone Number

School Name

Coach Information

- Meet with your coach and discuss the Conrad Challenge.
- Once they agree to be your team's coach, enter their full name and email address into the system.
- The coach will then receive an email confirming their participation.
- Then click "Save+Next" to continue your entry.

Parental Release

Download here: www.conradchallenge.org/20192020_rules

All questions must be answered, unless marked optional.

Basic Project Info | Team | Member Info | School Info | Coach Info | **Parental Release** | Attachments

Coach Information

Important
Please provide contact information for your team's coach. Please note that you will not be able to submit your project without an adult sponsor from your educational institution. If you have not recruited a coach yet, please share our [coach list](#) with your favorite teachers, mentors and fun adults. Most educators are extremely excited to participate - so there is nothing to worry about!

Please confirm, you do have a coach

Yes, we have a coach

First Name

Last Name

Email Address

Phone Number

School Name

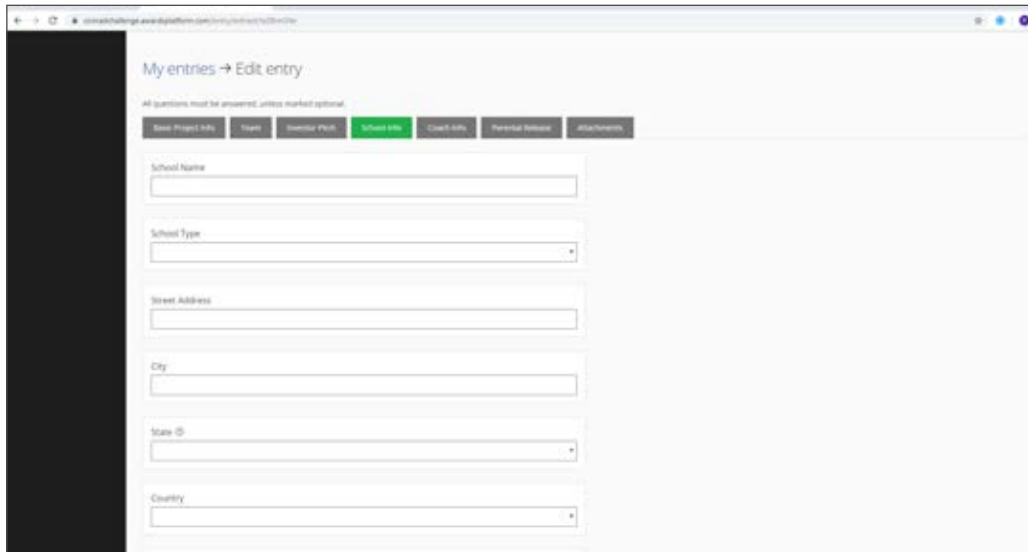
- ALL TEAM MEMBERS are required to upload the above signed release form. If you are competing and 18 years old, you can sign for yourself. If you are under 18 years old, you must have a parent/guardian sign your form.
- The team captain will enter their parental release form in this step. We will gather other team members' releases in a following step.
- Scans or photos of the signed release are acceptable for upload.
- Then click "Save+Next" to continue your entry.

NOTE: Your team will not be qualified for Round 2 until all team members have release forms on file!

NOW IT'S TIME TO COMPLETE YOUR INVESTOR PITCH!

To complete this round, teams must effectively explain their real-world solution by completing the Conrad Challenge Investor Pitch Form. This form details their idea, while also explaining and defending its viability as an innovative solution that is unique on the market. When completing the form, remember to be clear, short and concise.

Please utilize our resources to guide your team through the Challenge. The [Conrad Design Method® No Box Toolbox community](#) is available to support the brainstorming processes with instructional videos to aid in their product development. Be sure to also investigate [THE USE OF NASA TECHNOLOGY](#) available specifically to Conrad students!



The screenshot shows a web browser window displaying the 'My entries → Edit entry' page. At the top, there is a navigation bar with tabs for 'Basic Project Info', 'Team', 'Investor Pitch', 'School Info', 'Contact Info', 'Personal History', and 'Attachments'. The 'School Info' tab is currently selected and highlighted in green. Below the navigation bar, there is a form with several input fields: 'School Name' (text input), 'School Type' (dropdown menu), 'Street Address' (text input), 'City' (text input), 'State' (dropdown menu), and 'Country' (dropdown menu). A note at the top of the form states 'All questions must be answered, unless marked optional.'

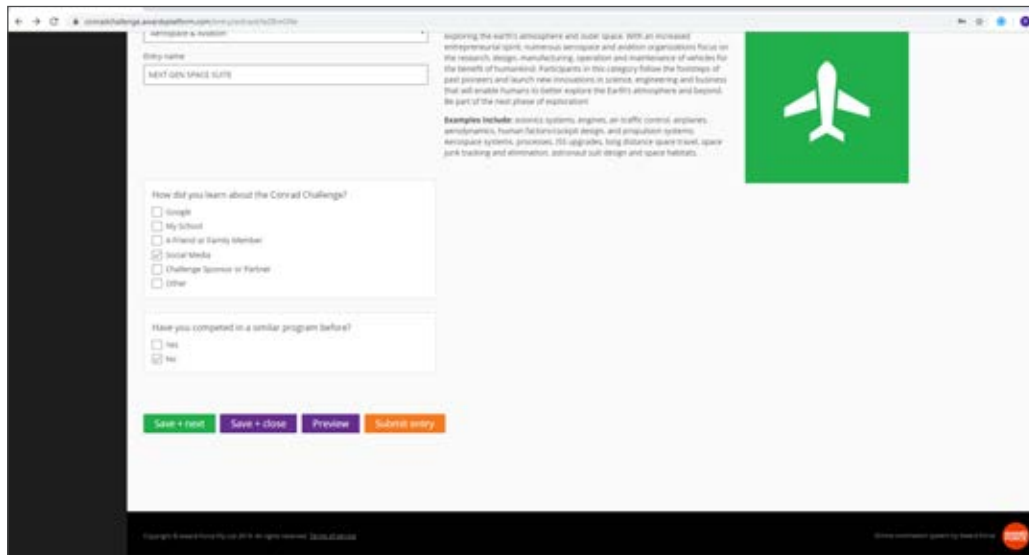
- **WHAT IS YOUR INNOVATIVE PRODUCT/SERVICE?**
- **WHAT CHALLENGE(S) IS YOUR PRODUCT/SERVICE DESIGNED TO SOLVE?**
- **WHAT ARE THE KEY FEATURES OF YOUR PRODUCT/SERVICE THAT MAKE IT SPECIAL?**
- **HOW IS YOUR PRODUCT/SERVICE INNOVATIVE AND DIFFERENT FROM OTHERS ON THE MARKET INTENDED TO SOLVE THE SAME CHALLENGES?**

Investor Pitch

- Complete all 4 questions.
- TIP: Create your investor pitch in a separate document prior to entering into the system. This will allow your team to collaborate before submitting.

Additional Attachments

This step is OPTIONAL. But if you would like to share, we would love to see a team photo!

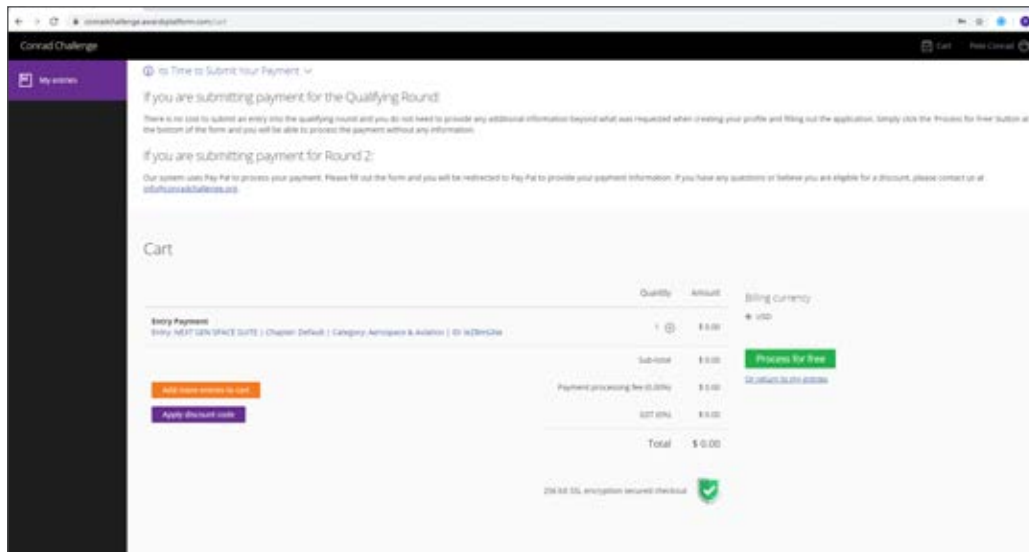


HOW TO SUBMIT:

CLICK “PREVIEW” TO REVIEW YOUR ENTIRE SUBMISSION. MAKE SURE YOUR ENTIRE TEAM REVIEWS AND APPROVES THE ENTRY.

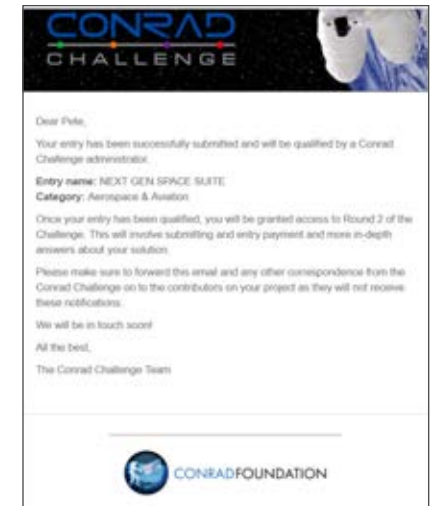
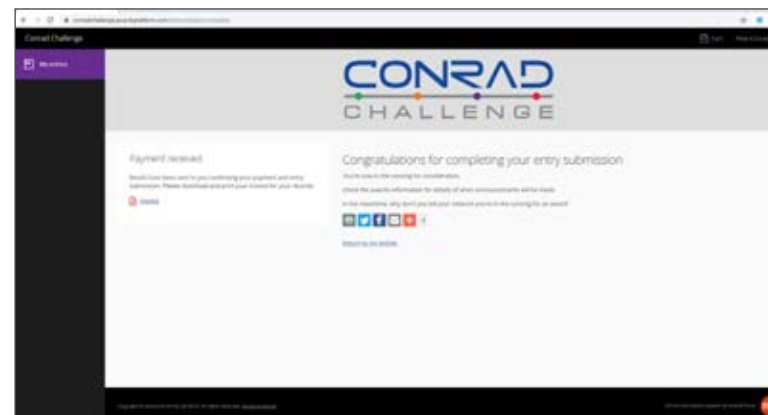
WHEN YOU’RE READY, HIT “SUBMIT ENTRY” AT THE BOTTOM OF THE PAGE

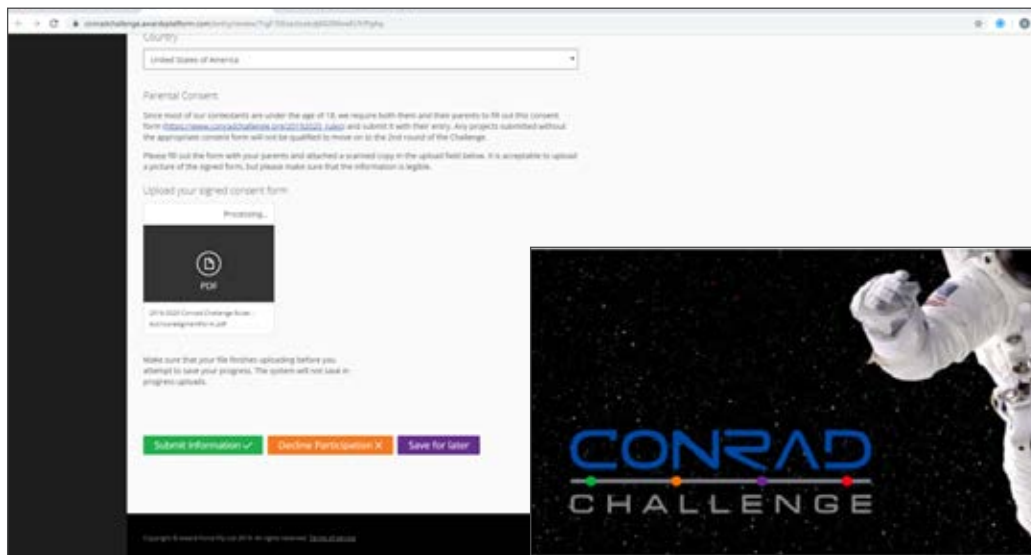
The system will flag and alert you of any errors that need to be corrected.



REMEMBER... ROUND 1: THE INVESTOR PITCH IS FREE!

- After you submit a payment screen will still appear.
- Click the green “Process for Free” button.
- You will get a confirmation screen and then receive an email confirming your team’s entry.






Hey there, Alan!

A project administrator has indicated that you will be participating in the submission of their project for this year's Conrad Challenge. Before the entry will be reviewed by our admins, we need you to provide us with some personal information.

Please fill out your information at the link below and make sure to submit ASAP so that we can review your team's entry and move you on to Round 2 if you qualify.

<https://conradchallenge.awardsplatform.com/entry/review/7rgF1EEesJzcelcdj6020KewEUYJPgAg>

Sincerely,
The Conrad Challenge Team



BUT WAIT! THERE ARE A FEW MORE STEPS TO ROUND 1...

EACH TEAM MEMBER WILL NOW BE ASKED TO SIGN IN AND COMPLETE THE REST OF THEIR INFORMATION!

- All team members will receive an email with a link to complete their additional information and upload their signed release form.
- If a team member does not upload a signed form, the team's registration will not be considered complete.
- Make sure to check in with your team members to ensure they follow all of the steps to complete their information.

ROUND 1: THE INVESTOR PITCH DEADLINE NOV. 1 @ 11:59 P.M. EST

NOW WHAT?

The Conrad Challenge will now review all submissions with our team of industry experts and advance teams who have completed all items and presented a valid new product/service.

NEXT: YOUR TEAM WILL RECEIVE ONE OF THE FOLLOWING EMAILS FROM THE CONRAD CHALLENGE.

YOUR SUBMISSION NEEDS A LITTLE MORE WORK. DON'T WORRY, YOUR TEAM CAN RE-SUBMIT BEFORE NOVEMBER 1.

CONGRATULATIONS YOUR TEAM HAS ADVANCED TO ROUND 2: THE BUSINESS PLAN!

- Your account profile may look a little different now. Please continue to review this guide for next steps.

This marks the end of Registration & Round 1: The Investor Pitch. Good luck to all teams!



Pete,

Congratulations! Your team's Investor Pitch has been reviewed and has advanced to Round 2: The Business Plan!

To check out the new materials available for you in this round, please log into your account and locate the "Reviews" tab on the left-hand side of the dashboard - this is where you will enter the information for your Business Plan. In addition to completing the Business Plan, you will also need to pay the Round 2 entry fee before advancing to the judging phase.

Please note the following:

- The team's Business Plan is due no later than 11:59 pm ET, Friday, January 3, 2019.
- The Entry Fee for Round 2 is \$399.00 USD per team. Discounted rates may apply for qualified title one schools or schools with multiple team participation. Teams submitting in more than one category will receive a discounted rate of \$150 on the second entry. Please email us at info@conradchallenge.org for special payment instructions and arrangements if you qualify.

And don't forget, we have resources to help you along the way!

- The Conrad Challenge Team

Make sure to follow us on social media and tell your friends to join the fun!

CONGRATULATIONS YOU'VE ADVANCED TO ROUND 2: THE BUSINESS PLAN



Pete,

Congratulations! Your team's Investor Pitch has been reviewed and has advanced to Round 2: The Business Plan!

To check out the new materials available for you in this round, please log into your account and locate the 'Reviews' tab on the left-hand side of the dashboard - this is where you will enter the information for your Business Plan. In addition to completing the Business Plan, you will also need to pay the Round 2 entry fee before advancing to the judging phase.

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And don't forget, we have resources to help!

- The Conrad Challenge Team

Make sure to follow us on social media and...

Support

If you have any questions on the entry process, please contact the Conrad Challenge by email or call (201) 325-6200. The Conrad office is open Monday - Friday from 9:00 a.m. - 5:00 p.m. CST.

- Please make sure all team personal details are entered accurately, including contact details, as this will be used in the awards presentation. If entered as a trustee.
- If your team advances to Round 2: The Business Plan, an entry fee of \$399.00 must be paid online by credit card prior to submission of Round 2 terms. If your submission fee has not been paid by the Round 2 (January 3, 2019) your entry will not be included for judging.
- Entry fees must be paid online by Credit Card (Visa, MasterCard and American Express).
- Teams entering multiple categories, have multiple teams entering from the same school, or qualify for a Title One school discount need to email info@conradchallenge.org for discounts and special payment arrangements.

My entries Active season (2018) Current

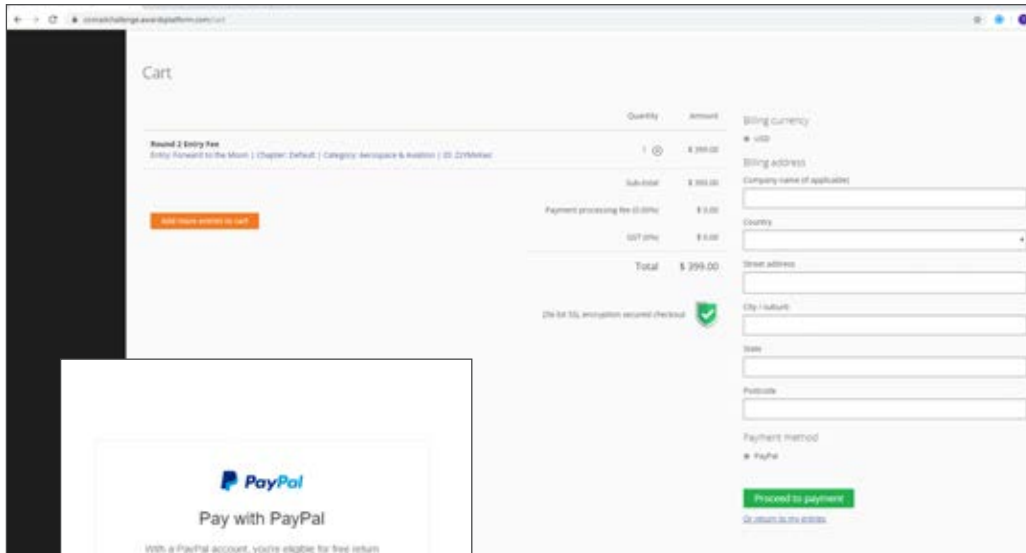
Start entry

ID	Entry	Champion	Category	Status	Updated
1	Forward on the Moon	Default	Aspire & Action	Submitted Paid Entry Payments	12 minutes ago

STEP 1: PAY TEAM REGISTRATION FEE

This must be completed under the team captain's account. Log into the portal, select your team's entry, and hit the green button underneath the title of your project that says 'Pay Round 2 Entry Fee'.

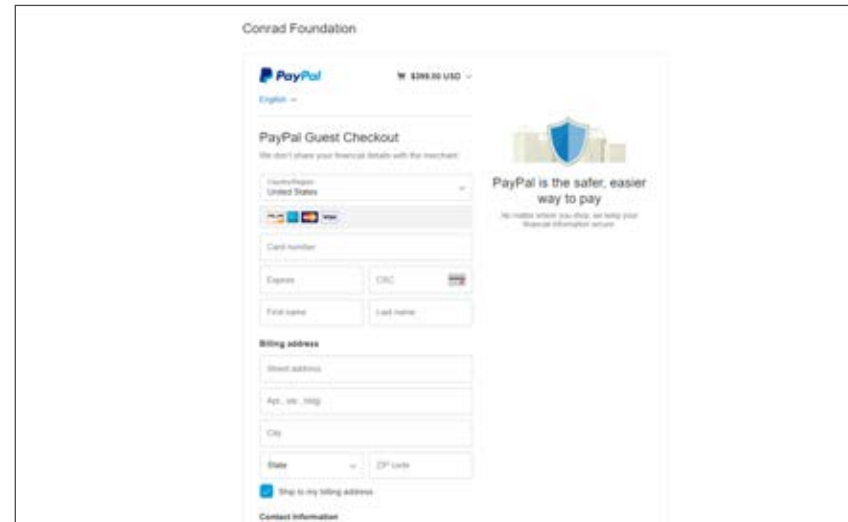
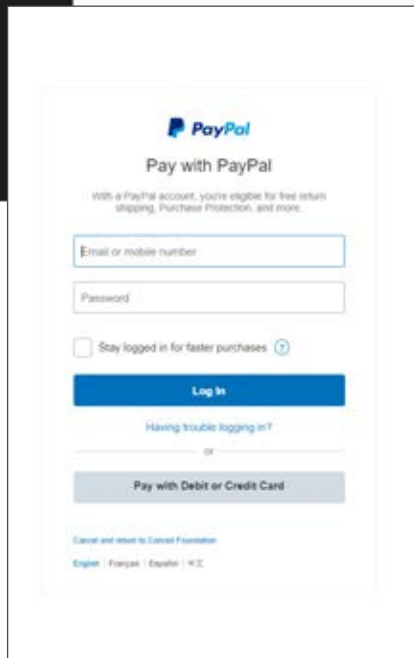
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- Please keep in mind that as the team captain you are in charge of collecting funds from your team members to cover the payment.

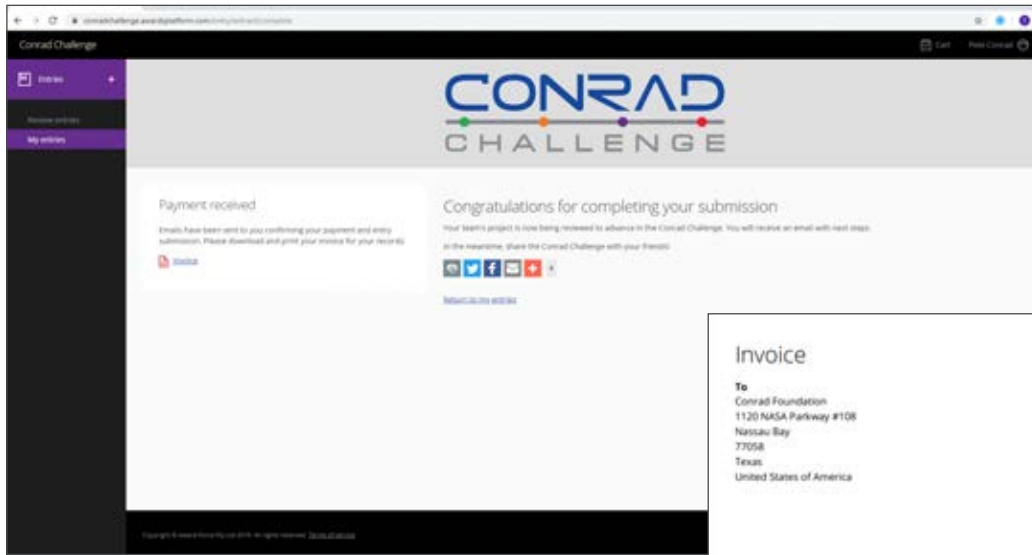


Next, you will be prompted to complete the billing address associated with the Debit/Credit Card being used. Once complete, click “Proceed to Payment.”

Finally, you will be redirected to PayPal to finish processing your payment. All payments will be processed through PayPal, however you do not need a PayPal account to complete this step.

- If you or someone on your team has a PayPal account, you can log in. Setting up a team PayPal account is another great way to collect funds from each team member and store raised money from fundraisers as well.
- If your team DOES NOT have a PayPal account, click the grey box ‘Pay with Debit or Credit Card’ to continue to the check out screen.





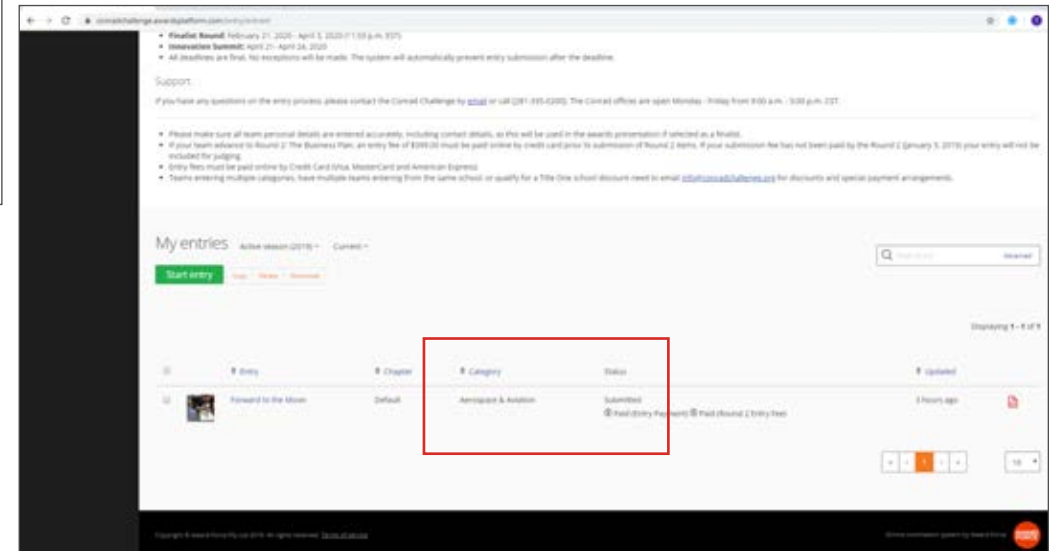
ALL PAYMENTS need to be complete prior to submitting the Round 2: The Business Plan. Deadline for payment is January 3, 2020 by 11:59 p.m. EST.

Entries submitted without payment will not be sent for judging.

Once you submit your payment, you will be brought back to our system!

- Here you can download your invoice receipt.
- This screen confirms your payment is complete.

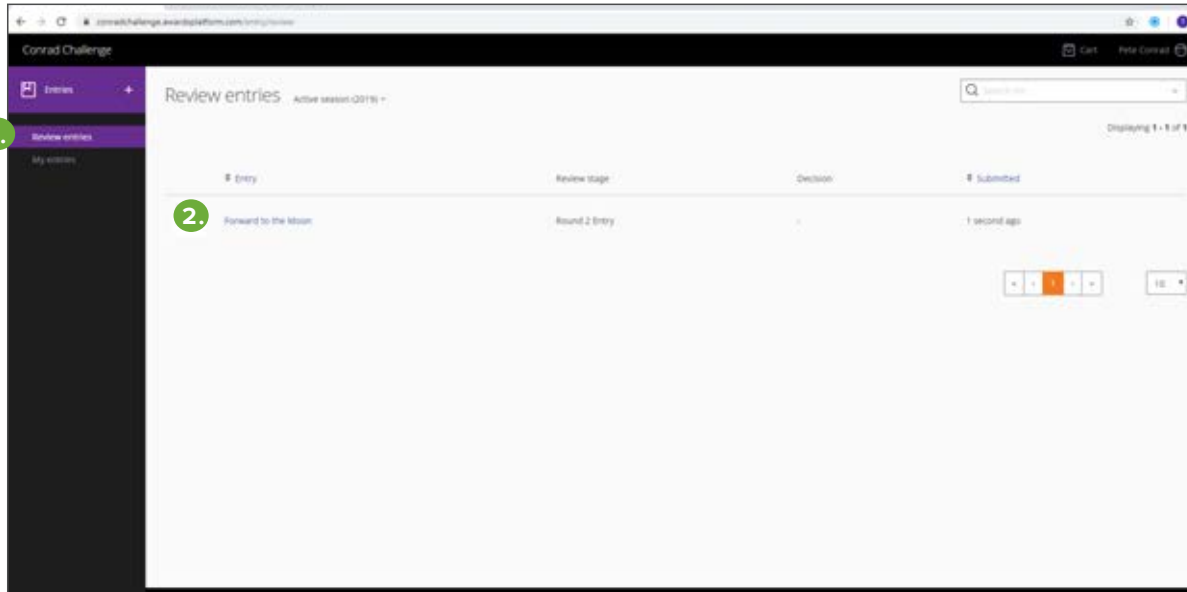
In your dashboard, the green payment button will no longer appear and your status will show as paid.



NOW FOR THE REAL FUN... COMPLETING THE BUSINESS PLAN

DEADLINE JAN. 3 @ 11:59 P.M. EST

1. Within your main dashboard's left navigation panel, you will see a new section called "REVIEW ENTRIES." Click there.
2. On the new screen, select your team's project name in blue to access the Round 2 submission section.



A business plan is a written description of your idea and its future. It tells what you are going to do and how you are going to do it by outlining the strategy for how your company will take your innovative idea to a viable product solution. By completing this plan, your team will look to the future and set goals for your product and business. You will explain how those goals are attainable and how your business would propose to meet those goals.

Please utilize our resources to guide your team through the Challenge. The [Conrad Design Method® No Box Toolbox community](#), as well as the [Alumni Docu-Series](#) are available to support the brainstorming processes with instructional videos to aid in product development. Be sure to also investigate the use of [NASA Technology](#) available specifically to Conrad students!

Conrad Challenge

Round 2 Entry Submission

Congratulations on your entry being qualified for Round 2!

The next step is... A business plan

A business plan is a written description of your idea and its future. It tells what you are going to do and how you are going to do it by outlining the strategy for how your business will take your innovative idea to a viable product solution. By completing this plan, your team will look to the future and set goals for your product and business. You will explain how those goals are attainable and how your business would propose to meet those goals. The purpose of your business plan is to tell investors what you will do and how your business and investors can benefit from the business goals. This document represents all aspects of the business planning process including marketing, finance, intellectual property management, human resources, management, and operations management.

Entry name

Forward to the Moon

Category

Aerospace & Aviation

About Your Company

Company intro

0 / 350 words

Introduce your team to the potential investors. How did the team form? What roles did each member play? What barriers or hurdles did the team overcome to develop its idea and complete its business plan?

Business Prospectus

Business Description

0 / 300 words

We recommend that your team works on all fields of the business plan in a separate document to allow your team to work collaboratively on the Business Plan prior to submitting online. Once your team is ready to submit, you can copy and paste responses into the system easily. If you choose to work in the system, all progress will be saved and available the next time you log-in.

Remember, there are points in the judging rubric for creativity. Please share your visual elements such as team photos, pitch video and graphics to showcase your creative skills!

THE FOLLOWING PAGES WILL OUTLINE ALL REQUIRED ASPECTS OF THE BUSINESS PLAN, AS WELL AS THE JUDGING SCORING CRITERIA.

COMPANY INTRODUCTION

Introduce your company (team) to your potential investors. How did the team form? What roles did each member play? What barriers or hurdles did the team overcome to develop its idea and complete its business plan?
(350 words maximum)

TEAM PHOTO(S)

One team photo is required. However, you are encouraged to submit multiple photos of your team collaborating and prototyping.

BUSINESS PROSPECTUS

An explanation of the innovation's market, expected development costs and sales strategy. Required fields include:

- 1. Business Description** – Describe your product/service and what makes your concept different from existing businesses. Describe the industry in which your concept best fits and demonstrate knowledge of the industry practices for similar businesses. Describe the factors you think will make your business successful. **(500 words maximum)**
- 2. Market Analysis** – Explain the market that your business is attempting to reach using its product/service. Do you plan to sell products commercially, license them to other companies, pursue government contracts, or some combination of these options? If commercial, who are the buyers? **(500 words maximum)**
- 3. Competitive Analysis** – Describe similar product/services already on the market or in development. Why is your concept better than those already in existence? All teams are required to provide at least three companies in this analysis including patent searches. **(500 words maximum)**
- 4. Cost** – Estimate the expenses in creating, operating, and marketing the business and its product/service. You will need to include the proposed team budget for attending the Innovation Summit should your team advance to the Final Round. **(750 words maximum)**
- 5. Funding Sources** – How will you gather funding needed to create your product (i.e., government research and development grants, venture capital, private investors, etc.)? You will need to include your proposed method of raising the funds to attend the Innovation Summit should your team advance to the Final Round. **(750 words maximum)**

TECHNICAL CONCEPT REPORT

An explanation of the innovation's technical and scientific details. Sections must include:

- 1. Technical Summary** – Outline key technical and scientific principles your concept utilizes in its design and functionality. **(500 words maximum)**
- 2. Need Statement** – Describe the challenge your concept will address. Provide information and resources on why the concept is important and how it will be used in the selected industry. **(1,000 words maximum)**
- 3. Background Technology** – State existing technology upon which the concept is built. Note any competing technologies or relevant patents and explain how your proposed concept is innovative and better than existing technologies that produce similar results. **(1,000 words maximum)**
- 4. Concept Details** – Describe in detail the concept's conceived function, operations, proposed development and any other information about the technical or scientific merits that will make this product successful. **(2,000 words maximum)**



Graphic Concept Representation

Develop a graphic depiction of your product/service that will help the judges understand your concept. This could be a computer graphic program drawing (e.g., Photoshop), a 3-D computer model (CAD), or a photograph(s) of an actual prototype or model. Accepted file include JPEG, GIF, TIFF, PNG or PDF.

Product Video

Upload a video (2 minutes or less) detailing your team's innovative concept. This video serves as your team's final pitch to advance to the Final Round (Summit).

Why is your concept needed today? How is it unique? Explain how your team is going to bring this concept to reality.

For submissions, YouTube and Vimeo links are preferred, but MP4 video files will be accepted if the team would like to keep their video confidential prior to the final round. If you wish to upload an MP4, please use the file upload immediately following this field.

Please note that points will be deducted for exceeding the allotted time limit in your Product video.

Product Video (MP4 Upload Option) (optional)

Use this field to upload an MP4 if you choose not to upload your product video to YouTube or Vimeo.

Team Photo

Upload a team photo (JPEG, PNG, GIF, TIFF, PDF)

Upload a team photo (JPEG, PNG, GIF, TIFF, PDF)

NOTE: All attachment files must be clearly named as Team Name_File Name. You should also reference attachments within the written fields to encourage judges to review with corresponding points.

Example: Innovative Robot will raise \$3 million in capitol over the next 3 years through multiple avenues (*reference attachment titled: InnovativeRobot_FundingBudget*).

SYSTEM NOTE: Large files may take time to upload. If the system says “Processing,” please wait patiently for the upload to complete.

GRAPHIC CONCEPT REPRESENTATION

Develop a graphic depiction of your concept that will help the judges understand your innovation. This could be a computer program drawing (e.g., Photoshop), a 3-D computer model (CAD), or a photograph(s) of an actual prototype or model. If your team builds a prototype, make sure you showcase it in your product video. **(Accepted files include JPEG, PNG, GIF, TIFF or PDF. URL links from third party solutions like TinkerCad.com are also welcome)**

***NOTE: Working prototypes and models are not a requirement of the Challenge.**

PRODUCT VIDEO

Create a video (**7 minutes or less**) detailing your team’s innovation. This video serves as your team’s final pitch to advance to Round 3: The Innovation Summit. You will be asked to explain why your concept is needed today, how is it unique, and how your team is going to bring this concept to market. **Accepted formats include a direct URL link from YouTube/Vimeo or uploaded MP4 video files.**

ADDITIONAL ATTACHMENTS

We welcome additional attachments to further explain any aspect of the Business Plan. Examples could include cost analysis spreadsheets, charts, graphs, or graphics showcasing comparisons and/or additional information.

HOW ARE BUSINESS PLANS JUDGED?



Business Plans will be reviewed by the Conrad team to ensure all requirements have been met. Teams who successfully meet the requirements listed above will be **recognized as Conrad Innovators** and their plans will be shared with expert judges for official scoring.

Judging of the submitted Business Plans will be conducted online by a panel of subject matter experts from industry and academia.

Each team entry will be reviewed by 3-5 judges who will not only score, but provide feedback which teams will receive shortly after judging concludes.

JUDGING CRITERIA

Judges will score each Business Plan based on the following criteria totalling up to 100 points:

Technical Innovation (25 Points):

How new or unique is the idea?

- The technology must be unique, or a combination of existing technologies used in a unique way to create a new system.
- Does it illustrate innovative business concept(s)?

Technical Practicality (20 Points):

Will this product work technically?

- The team does not have to show proof that the product will work, but should show an understanding of what research or experiments are needed to prove that it will work.
- Is the team making realistic assumptions?

Marketability (20 Points):

Does the team demonstrate understanding of the key markets for their product?

- Clear understanding of the challenge and potential users.
- Will the team pursue government Research & Development (R&D) grants, licensing to another company, or create an entrepreneurial startup?
- Is there data showing how similar products have been successful?
- Did the team perform a competitive analysis for their market?
- Did the team clearly explain the differentiators between their innovation and current products/services in the market?

Costs (10 Points):

Does the team demonstrate understanding of the product development costs?

- The team will estimate costs to take their innovation to market, which should also include costs to participate during the Innovation Summit.
- Cost needs include any material estimates, R&D (including grants), market studies and labor costs.
- Teams need to be as detailed as possible.

Funding Mechanisms (10 Points):

Does the team understand the basics of how its innovation could be funded?

- If it is relatively simple, can the team raise money for prototypes and begin sales through friends and family?
- Does the team need to consider grants, loans, or bringing on investors or partners in their efforts?

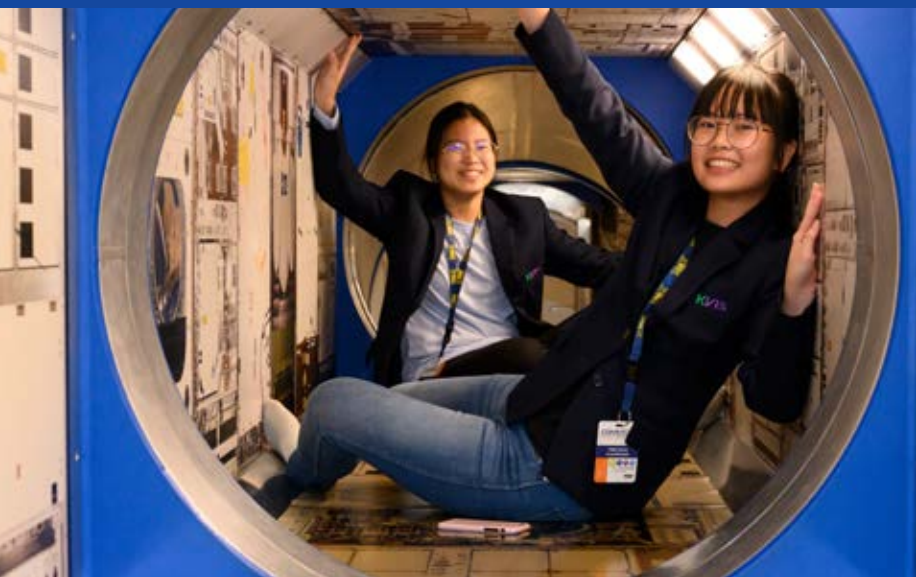
Team Creativity & Professionalism (15 Points):

Does the team successfully present their concept to potential investors?

- Does the company introduction tell a story?
- Do they present high quality graphic representations, product video and other supporting graphics?



THE CONRAD CHALLENGE INNOVATION SUMMIT APRIL 21-24, 2020



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