AI in Teaching

Ian Roy
4-12-2024
R&D
Product Design
Selling & Marketing
Design Aggregation
Difficult Conversations
Code-Copilot
Design the IDEAL wallet.

Draw 3min

Sketch your idea here!
Start by gaining empathy.

How to facilitate these steps

1—Interview your Partner

Have participants partner up in pairs. It helps to refer to “Partner A” and “Partner B” to simplify your language in these interactive steps.

“Your challenge is to design something useful and meaningful to your partner.”

“The most important part of designing for someone is to gain empathy for that person.”

“One way to do this is to have a good conversation.”

Be clear about the logistics of the interviews:

“Partner A will have four minutes to interview Partner B, and then we will tell you when to switch.”

“As a starting point, ask your partner to walk you through the contents of their wallet.”

“When do they carry their wallet? Why do they have a particular card in there? What do the things in their wallet tell you about their life?”

Tell them to take note of things they find interesting or surprising.

“Let’s begin!” (Don’t forget to start playing the upbeat music now.)

2—Dig deeper

After the first set of interviews, tell them to follow up on things that intrigued them during the first interview.

“Try to dig for stories, feelings, and emotion.”

“Ask ‘WHY?’ often”

“Forget about the wallet, find out what’s important to your partner.”

“Why does he still carry a picture of his ex-girlfriend? When was a time he carried a lot of cash? What does she remember most about her first paying job?”

Remind them you will let them know when time is up.

“Time to switch! Again, make note of any unexpected discoveries along the way, capture quotes!”
Sure, here's a list of criteria for the perfect wallet:

1. **Size**: It should be compact enough to fit comfortably in your pocket or bag, but spacious enough to hold all your essential cards and cash.

2. **Durability**: A perfect wallet should be made from high-quality materials that can withstand daily wear and tear.

3. **Organization**: It should have multiple compartments or slots to keep cards, cash, and other items organized and easily accessible.

4. **Security**: The wallet should have features like RFID-blocking technology or a secure closure mechanism to protect your personal information and belongings from theft or unauthorized access.

5. **Style**: Choose a wallet that reflects your personal style and preferences, whether it's sleek and minimalist or bold and eye-catching.

6. **Functionality**: Consider additional features such as a coin pocket, ID window, or detachable card holder for added convenience.

7. **Comfort**: Opt for a wallet with smooth edges and a comfortable feel, especially if you carry it in your pocket for long periods.

8. **Price**: While quality often comes with a higher price tag, aim for a wallet that offers good value for money and meets your needs without breaking the bank.

9. **Brand Reputation**: Look for wallets from reputable brands known for their craftsmanship and customer satisfaction.

10. **Warranty**: Check if the wallet comes with a warranty or guarantee, providing you with peace of mind in case of any defects or issues.
The ideal wallet - with a digital screen where it can both store ID cards but also mimic any credit card.
wallet w high tech security features like touch ID
world's smallest wallet
wallet w tracker
cool digital wallet
wallet for a practical business student w organization features
waterproof
1. show me a waterproof physical wallet with many slots for credit cards, a cash compartment, and coin compartment.

2. show me a payment method without cash or credit cards.
If your team is performing less well than ChatGPT, then your whole job can be replaced with automation.

My only prompt for ChatGPT was: "make me a marketing plan for a university hackathon"

It returns:

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Certainly! Here's a detailed marketing plan for a university hackathon:

University Hackathon Marketing Plan

1. Objective:
   Raise awareness, drive participation, and engage students and stakeholders in a memorable hackathon event.

2. Target Audience:
   Primary: University students (across various disciplines)
   Secondary: Faculty, local tech companies, alumni, and the general tech community

3. Messaging:
   “Join the [University Name] Hackathon – Innovate, Collaborate, and Shine! Your opportunity to make a difference, network, and win cool prizes.”

4. Marketing Channels & Tactics:
   a. On-Campus Activities:
      Posters & Banners: Design attractive posters and place them in high-traffic areas: libraries, labs, dining halls, and dorms.
      Class Announcements: Coordinate with professors to make brief announcements about the event in relevant courses.
      On-Campus Tabling: Set up an information booth in the campus center or main plaza with flyers and a sign-up sheet.
      Workshops: Host preparatory workshops to teach necessary skills and generate interest.
   b. Digital Marketing:
      Email Campaign: Use the university's mailing system to send out announcements, reminders, and updates.
      Website: Create a dedicated event page on the university website with details, schedules, registration info, and FAQs.
      Social Media: Utilize platforms popular among students (e.g., Instagram, Twitter, Facebook) for teasers, countdowns, and updates.
      Promotional Video: Create a hype video showcasing highlights from previous hackathons or what to expect and share it on platforms like YouTube and Vimeo.
   c. Community Engagement:
      Local Tech Meetups: Attend tech meetups and events in your city to spread the word.
      Partnerships: Collaborate with tech companies, startups, and local businesses for sponsorship and event promotion.
      Alumni Outreach: Reach out to alumni working in tech for mentorship, judging, or just spreading the word in their networks.
   d. Incentives:
      Prizes: Announce appealing prizes to attract competitive teams.
      Certificates: Provide participation certificates which can add value to a student's CV.
      Guest Speakers: Invite renowned personalities from the tech industry for keynote sessions or panel discussions.

5. Timeline (assuming a 3-month lead time):
   Months 1-2:
   Finalize event date, venue, and format.
   Secure sponsorships and partnerships.
   Start on-campus promotions with posters and tabling.
   Launch website and initiate social media campaigns.
   Month 2:
   Roll out the email campaign.
   Begin registrations.
   Host preparatory workshops and tech sessions.
   Month 3:
   Intensity social media promotions; begin countdown.
   Finalize logistics, mentors, and judges.
   Send out final reminders and schedules to participants.

6. Budget Allocation:
   Venue and Logistics: 30%
   Marketing and Promotions: 25%
   Prizes and Incentives: 20%
   Food and Beverages: 15%
   Miscellaneous: 10%

7. Post-Event:
   Feedback: Conduct a feedback survey to understand what went well and areas of improvement.
   Thank You Notes: Send out appreciation notes to participants, mentors, judges, and sponsors.
   Photo and Video Compilation: Share event highlights on social media and the university website.
   Press Release: Share the success and highlights of the hackathon with local media and online tech portals.

8. Key Performance Indicators (KPIs):
   Number of registrations vs. actual participants.
   Social media engagement metrics (likes, shares, comments).
   Feedback survey results.
   Number of sponsors and partnerships secured.
   Media mentions and coverage.

Remember, the effectiveness of this plan depends on the execution, enthusiasm of the organizing team, and adaptability to unforeseen circumstances. Adjust the plan as per your university's specific context and resources available. Good luck with your hackathon!
BUS233A: “Entrepreneurship and Rapid Prototyping”
Optional assignment to replace your lowest quiz grade:
Spend 1 hour using Open AI tools and your own critical thinking, entrepreneurship skills, and storytelling skills to create a pitch deck for our class (BUS233A: "Entrepreneurship and Rapid Prototyping").

Generate a wireframe for your pitch using https://tome.app to generate base slides, and then fill in content using https://chat.openai.com/ and edits of your own design. Pull from the syllabus (attached here) as base content - it may also help to add your own experiences around the class and rapid prototyping your product (you could be a 3rd party validator for the class).

Submit the pitch deck to ianroy@brandeis.edu no later than May 10th.
From Idea to Reality: Mastering Entrepreneurship & Rapid Prototyping

MSBA/MBA ‘24
Overview Of The Class

The class on entrepreneurship and rapid prototyping was a life transforming and watershed moment for all participating students. The course began with a comprehensive introduction to entrepreneurship, including the definition of entrepreneurship and its importance in today's world.

The Professor emphasized the need for entrepreneurs to have a clear understanding of their target market, as well as the importance of conducting thorough market research before launching a product or service. The participants were also introduced to various entrepreneurial models and frameworks, such as Lean Startup. Through a combination of HBS Case Studies and working on startup ideas conceived in the class, students practically learnt the basic methodologies that entrepreneurs use to launch products and services.
Rapid Prototyping

The art of rapid prototyping was the greatest revelation I took from this class. I learnt that rapid prototyping is a crucial step in the product development process and helps entrepreneurs to test and validate ideas and designs in a cost-effective and timely manner.

With the ability to rapidly prototype, businesses can speed up the time-to-market and gain competitive advantage by bringing innovative products to market before their competitors. The class was also introduced to various entrepreneurial models and frameworks, such as Lean Startup and Hypothesis Driven Entrepreneurship.
Apart from the technical skills, the class also focused on developing an entrepreneurial mindset. The instructor emphasized the importance of taking calculated risks, being resilient in the face of failure, and having a growth mindset.

Students learnt about the various personality traits and habits of successful entrepreneurs, such as creativity, persistence, and adaptability. They also had the opportunity to reflect on their own strengths and weaknesses and develop a plan for personal growth.
Another important topic covered in the class was design thinking. The instructor explained that design thinking is a human-centered approach to problem-solving that emphasizes empathy, ideation, and prototyping.

We learnt about the various stages of design thinking, including empathizing with the users, defining the problem, ideating possible solutions, prototyping and testing. They also had the opportunity to apply design thinking principles to a real-world problem and come up with innovative solutions.
Pitching and Oral Presentation Skills

The class taught us to effectively communicate one's business idea so as to gain funding and support from investors, partners, and customers. Through practice and feedback, students learnt how to create and deliver compelling pitches that capture the attention of their audience and effectively convey the value proposition of their product or service. Additionally, the course focused on developing oral communication skills such as active listening, giving and receiving feedback, and adapting one's communication style to suit different audiences. These skills are essential for any entrepreneur looking to succeed in today's fast-paced and ever-changing business landscape.
Guest Speakers

Throughout the course, we had the opportunity to interact with several startup founders who shared their experiences and insights on entrepreneurship and rapid prototyping.

**Unforgettable Quotes:**

“Build the plane while it’s taking off”

“If you are serious about entrepreneurship, don’t have backup plans.”
Conclusion

In conclusion, the class on entrepreneurship and rapid prototyping was a valuable learning experience for all the participants. The course provided a comprehensive introduction to entrepreneurship, rapid prototyping, design thinking, and the entrepreneurial mindset.

The participants also had the opportunity to work on a real startup idea, interact with guest speakers, and reflect on their own strengths and weaknesses. Overall, the class provided a solid foundation for anyone interested in pursuing entrepreneurship or innovation.
BUS233A: Extra Credit December 2023

Designed by TA Varun Prasad Edupuganti

Varun Edupuganti (He/Him) · 1st
Empowering Job Seekers with Superpowers

@channel (OPTIONAL ASSIGNMENT) To replace your lowest quiz grade this semester

Optional Assignment: Re-Imagining Toothpaste Using Design Thinking for the Digital Age

Overview
You are tasked with reimagining the toothpaste industry by applying design thinking methodologies and embracing digital innovation. Your challenge is to understand the nuances of the toothpaste market, disrupt it with a fresh perspective suited for the social media era, and conceptualize a unique toothpaste brand from the ground up.

Key Tasks
1. Industry Understanding:
   - Delve deep into the toothpaste industry to grasp how it currently operates and identify potential gaps or niche problems.
2. Digital Disruption:
   - Focus on how the sector can be revolutionized to appeal to the social media-savvy audience.
3. Design Thinking Approach:
   - Utilize the stages of Empathy, Ideation, Prototyping, and Feedback to develop your pitch.
   - Start with empathizing with the people who toothpaste (Everyone) needs and problems in the toothpaste sector.
   - Move to ideation, where you brainstorm innovative solutions.
   - Develop a prototype of the concept, and would take it to your Target audience.
   - Finally, iterate on the feedback from Initial Customers
4. Research and Development Tools:
   - Use AI and digital tools like ChatGPT for research and idea validation.
   - Use Leonardo or similar tools for creating your product prototype Image.
5. Presentation:
   - Use Gamma or equivalent software to create a compelling presentation.
   - Ensure your presentation is concise, limited to 10 slides, and effectively communicates your innovative solution.

Objective
Your goal is to demonstrate how a toothpaste company can be built from scratch using design thinking methodology. Your approach should illustrate the power of starting small, empathizing with the user, and systematically building upon ideas to create a groundbreaking product tailored for the digital age.
Pain Points

**Sensitivity**
Consumers experience discomfort or have preferences related to toothpaste ingredients, such as sensitivity to certain components or a desire for natural and organic formulations.

**Flavor**
Some customers may dislike the taste or find the flavor too intense in certain toothpaste brands.

**Whitening**
Some consumers are dissatisfied with the effectiveness of whitening toothpaste, expecting noticeable results within a reasonable timeframe.
Pain Points

**Packaging**
Environmental concerns about excessive packaging and plastic waste, with consumers seeking more sustainable options in toothpaste packaging.

**Time Constraint**
Individuals on the move may seek convenient, on-the-go oral care alternatives that can be easily integrated into their schedules.

**Price Sensitivity**
Certain toothpaste brands are too expensive, especially if the consumer perceive minimal differences in effectiveness compared to more affordable options.
Value Proposition

A convenient, on-the-go solution for cleaning and whitening teeth with multiple flavors

Natural Ingredients
We offer a range of flavors derived from natural ingredients like mint, citrus, or berry extracts.

Whitening Effect
Clinically proven solution for achieving a brighter and whiter smile.

On The Go
Dissolvable tablets and travel-friendly packaging, ensuring our users can maintain their whitening routine anytime, anywhere.
Additional Value Proposition

**Subscription Service**
We offer a hassle-free subscription model, ensuring users receive toothpaste on time with cost savings.

**Eco-Friendly Packaging:**
With a commitment to the environment, GoGleam comes in a sustainable packaging.
GoGleam Pods

GoGleam is a revolutionary toothpaste brand that combines innovation, natural ingredients, and advanced whitening effects. Designed for the on-the-go lifestyle, GoGleam offers affordable whitening solutions, featuring dissolvable tablets and eco-friendly packaging.
Target Market

On-the-Go Professionals
Busy professionals who value portability and the ability to maintain oral care routines during hectic schedules

Eco-Conscious Consumers
Environmentally conscious consumers who seek sustainable oral care options
Size the Market

We aim to capture 5% of the market in North America and Europe, focusing on environmentally conscious consumers with our eco-friendly toothpaste.

$18.70 Billion
Total Available Market (TAM)

$5.61 Billion
Serviceable Available Market (SAM)

$280.5 Million
Serviceable Obtainable Market (SOM)
Business Model

Individual Purchase on our website: go gleam.com and on Amazon

Subscription based on usage frequency, allowing customers to choose plans that align with their oral care needs, whether for daily, monthly, or quarterly supplies.
Promotion

- **Influencer Partnerships**
  Collaborate with social media influencers for authentic reviews and endorsements.

- **Referral Incentive Program**
  Reward Early Adopters for referring friends and family to try GoGleam

- **Viral Marketing**
  Leverage trends, challenges, or relatable content related to oral care and GoGleam to attract an organic audience
Love the refreshing berry flavor! It's a delightful change from traditional mint toothpaste. Leaves my mouth feeling clean and fruity.

Really like the eco-friendly packaging. It aligns with my values, and the berry-flavored tablets are a hit with my entire family.

The dissolvable tablets are a game-changer for my on-the-go lifestyle. No mess, and the berry flavor makes brushing away from home much more enjoyable.
Contact Us

@gogleam

@gogleam

hello@gogleam.com

www.gogleam.com
"What is the most urgent matter in designing ILEs?"
“What should iLRN focus on as a community?”

Workshop Objectives:

- Acknowledge and leverage the strengths of iLRN conferences as identified by the attendees.
- Collaboratively ideate and develop innovative solutions addressing the urgent matters in designing Immersive Learning Environments (ILEs).
- Foster interdisciplinary synergies, facilitate a shared understanding, and develop language and standards around “What our network needs?”
Standards Workshop Wrap Up:

THEMES AND IDEAS
Overview of this Session

**Discovery** - What are Narrative Standards?

**Empathy** - Broaden Definition of Narrative Standards

**Ideation** - Generate List of Potential Standards

**Define** - Refining These Lists

**Testing** - Apply These Standards to Real Projects
Standards Workshop Wrap Up:

THEMES AND IDEAS
Standards Workshop Wrap Up:
THEMES AND IDEAS

Potential Tech Standards:

- **Accessibility**: [Experiential Design + User Experience]
- **Portability**: [User Experience]
- **Usability**: (User Agency + Interaction) Verbs
- **Onboarding**: How much training?
  - Assess User Background
- **Purpose of the Environment**: (Specialized vs Custom) vs Off-the-Shelf
- **How Fits the Medium**: How fits expectations

Engagement Standards

- **Defining Terms**: Part of onboarding user orientation/onboarding strategies
- "A facilitator should guide through onboarding"
- "Documentation can guide you through onboarding"
- "User should be able to describe their feelings after the experience"
- "The user should get better each time they use it"
- "The user should remember one thing"
- Outcomes to create & to experience
- "There can be outcomes, but not necessary"
- Experience vs outcomes/Purpose vs outcome
- Emergence = Does the game respond to you - by your presence
- "Purpose of use should be defined" *learning outcomes/lectures/discussions/workshop*
  - What is the model you want to choose? Sequential
  - "Tutorials should be considered by the Designer"
  - "What kinds of tutorials/topics are needed?" in environment or reference videos
  - "How is the professor trained?"
  - Should the professor have input on the content?
  - What can designer ask the professor?
  - "Accessibility should be considered"
  - "Kind of technology should be considered"
  - "Is it feasible? Should be considered = UI/UX"
Part 1: 15 mins
Introduction, summary & empathy for the problem

Part 2: 30 minutes
Ideation and Prototyping on Urgent Matters

Part 3: 45 minutes
Iteration & Feedback
GIVEN all of this below - what are the most urgent matters to address in a 90 minute design thinking session?

Here are the main reasons attendees for attending ILRN conferences, summarised as bullet points:

To deepen friendships and maintain professional relationships with impactful people.
To hear new, interdisciplinary research that is fresh and not just recycled from other conferences.
To contribute to the development of the field as a whole and grow personally as a researcher.
To enjoy the laid-back, informal feel of the conference which allows meaningful connections with both senior and junior participants.
To appreciate the inclusivity and accessibility of ILRN.
To help achieve better learning outcomes for vulnerable populations such as individuals with mental illness, special education needs, adult learners, and traditionally underrepresented populations like females and people of color in STEM.
To learn how to conduct immersive learning research.
To enable more people to learn complex frameworks and tools in a participatory manner, thereby facilitating understanding of complex concepts.
To be part of a community that is warm, inclusive and offers opportunities to share and learn widely about immersive learning.
To broaden the understanding and application of immersion, aligning theoretical frameworks with design practices.
To be part of a future-oriented community that sees the imminent explosion of possibilities in immersive learning.
To be part of a loved community and learn from diverse perspectives and experiences.
To experience the 'magic' of ILRN and enjoy the immersive learning experience it offers.
To have more time for meaningful interactions, beyond formal presentations.
To be part of evening events that offer the opportunity to connect with everyone, including shy newcomers.
To connect with experts and make valuable connections like the Jodes, Jiwon Hur would.

Message ChatGPT...
The priorities focus on:

Improving collaboration and resource sharing,

Fostering inclusivity and diversity,

Addressing ethical concerns,

Enhancing practical application,

and leveraging technology effectively.
1. Accessibility, Inclusion, and Representation: Focus on ensuring disability access, cultural representation, and lowering the cost of entry through open source tools. This also includes the desire to broaden the iLRN community and include other academic fields, especially psychology and communication.

2. Ethics and Privacy: Address ethics and privacy issues, with an emphasis on creating a way to share solutions to these problems. This includes creating resources that can be utilized by the entire community.

3. Collaboration and Skill Matching: The desire for better collaboration, including the idea of skill matching or pairing across people in the iLRN network, is a significant priority. This includes leveraging each member’s strengths, such as pursuing funding or copy editing.

4. Local Engagement and Community Building: The need for local chapters to facilitate face-to-face engagement between conferences was highlighted. This was linked to a broader desire to foster a sense of belonging within the iLRN community.

5. Practical Application and Literacy in Design: Emphasis was placed on providing practical advice for classroom settings and the desire for educators to become designers and vice versa. This includes offering workshops on wellbeing and a crash course in design literacy.

6. Resource Sharing and Community Definition: Teams suggested ongoing discussions, sharing of use cases, and resources between conferences. The need to define the iLRN community to foster belonging was also identified.

7. Cross-Disciplinary Interaction and Integration: Inviting and integrating knowledge from various academic fields and disciplines, between researchers and teachers across academic disciplines, was identified as a key priority.

8. Technology Testing and Interaction: There was a desire to have opportunities to test technologies and get more hands-on experiences at the conferences, such as through demos or vendor interactions.

9. AI Leverage: Connection with AI initiatives and resources to leverage AI in the field of immersive learning.

10. Broad Visibility of iLRN: There was a call for increasing the visibility of iLRN broadly, to attract more participants and strengthen the impact of the community.

11. Bridging Gap Between Educators and Developers: A platform for educators to express their needs and desires from developers was suggested.

12. Pursuing Collaborative Initiatives: Teams suggested that as experts in the field, they should define what is essential in this field and pursue it collaboratively.
Strategic Planning: 3 Pillars for the next 3 years
#1: Accessibility, Inclusion, and Open Source Resource Development

This pillar reinforces iLRN's commitment to designing and facilitating immersive learning experiences (ILEs) that are accessible and inclusive, considering all abilities, cultural backgrounds, and learning styles. An integral part of this pillar is also an emphasis on open source development, lowering the barrier to entry and encouraging wide-ranging participation. By making resources, tools, and platforms freely available and modifiable, iLRN enables innovation and inclusivity, allowing everyone to contribute to and benefit from the shared knowledgebase and advancements in immersive learning technologies. This ensures that the benefits of immersive learning are not just confined to those with the resources to pay for proprietary tools, but are made accessible to everyone.
Recognizing the implications of rapidly advancing technology on personal privacy and ethics, iLRN prioritizes responsible use of technology in Immersive Learning Experiences (ILEs). This includes issues related to children’s rights, data privacy, biometrics, and the implementation of AI tools, and the data sets the AI tools train on. This pillar underscores the necessity to create ethical guidelines, share resources, and initiate community-led discussions to address these concerns. The focus is not just on problem-solving, but on the proactive establishment of standards and practices that ensure the responsible and ethical use of immersive learning technology in the age of AI. This also includes the thoughtful integration of AI, emphasizing transparency, fairness, and respect for user & data consent.
### #3: Community Engagement and Visibility

The 3rd pillar focuses on enhancing iLRN's community engagement and visibility. This entails designing and implementing strategies to increase participation in off-conference activities, including virtual meetups, webinars, workshops, and collaborative projects. Local chapters should be encouraged to organize face-to-face engagements, fostering a more tangible sense of community. Furthermore, this pillar emphasizes the importance of raising iLRN's profile broadly, promoting its mission, achievements, and opportunities to a wider audience. This not only helps grow the iLRN community, but also amplifies its impact on the wider field of immersive learning.
You can you write me a script to batch automate focus stacking every 4 photos in a directory in photoshop?

ChatGPT Sure! Focus stacking in Photoshop typically involves loading the images as layers in a single document, auto-aligning the layers, and then auto-blending the layers to achieve the desired focus effect. Here's a simple script to automate focus stacking for every 4 photos in a directory:

```javascript
// Set the path to your directory containing the images here.
var inputFolder = Folder.selectDialog("Select a folder of images for focus stacking");

if (inputFolder) {
  var fileList = inputFolder.getFiles(function(file) {
    return (file instanceof File && file.name.match(/\.(jpg|jpeg|png)/));
  });

  var totalFiles = fileList.length;

  for (var i = 0; i < totalFiles; i += 4) {
    // Check if there are enough images left for a full stack of 4
    var stackSize = Math.min(4, totalFiles - i);
    if (stackSize < 4) {
      break; // Break if there are less than 4 images left
    }

    // Load images as layers
    var loadLayers = [];
    for (var j = 0; j < stackSize; j++) {
      loadLayers.push(Folder.selectDialog("Select the image "+j));
    }

    // Add stacking layer
    app.activeDocumentlayers.add();
    for (var j = 0; j < stackSize; j++) {
      layers[j].move(loadLayer, ElementPlacement.INSIDE);
    }
  }
}
```

You it didn't work - can you optimize this for photoshop 2023

ChatGPT I apologize for the inconvenience. As of my last training data in January 2022, Adobe Photoshop 2023 specifics were not available. However, I can provide some general troubleshooting steps and modifications you can make to ensure better compatibility:

1. **Error Messages**: If Photoshop gave you an error message when trying to run the script, it can be valuable in diagnosing the problem. If you provide that, I can give more specific advice.

2. **Ensure Compatibility with JavaScript**:
   - Make sure that Photoshop's scripting capabilities are enabled and set to JavaScript (not AppleScript or VBScript).

3. **Layer Movement**: In the provided script, layers are moved into a new layer set to simplify alignment. This process might be different in newer versions of Photoshop. You can comment out these lines and see if that helps:

   ```javascript
   var layerSet = app.activeDocument.layers.add();
layers[0].move(layerSet, ElementPlacement.INSIDE);
layers[1].move(layerSet, ElementPlacement.INSIDE);
layers[2].move(layerSet, ElementPlacement.INSIDE);
layers[3].move(layerSet, ElementPlacement.INSIDE);
   ```

4. **Update Scripting API**: Adobe occasionally updates their scripting API. You might want to check Adobe's official scripting guide for Photoshop 2023 to see if there have been significant changes to the functions or methods used in the script.
You
This works, except I am getting an error 8800 that this functionality is not available in
this version of photoshop - for both the auto-align layers and the auto-blend layers:
executeAction(idBld, descBlend, DialogModes.NO);

can you suggest alternate syntax that may work with my version of photoshop?

ChatGPT
Error 8800 is a generic error in Photoshop scripting that denotes that a command isn’t
available or is used incorrectly. If auto-align and auto-blend functions are causing the
error, it’s possible that the scripting interface to these functionalities has changed or is
being called incorrectly.

However, if you are certain that auto-align and auto-blend features are available in your
Photoshop version via the UI, we can attempt to call them in a different manner using
the `ScriptListener` plugin approach. The `ScriptListener` plugin listens to
commands made in Photoshop and converts them to JavaScript (or VBScript) for use
in scripting.

Here’s a general approach on how you can use `ScriptListener` to get the required
syntax:

1. **Install and Setup ScriptListener:**
   - Close Photoshop.
   - Copy the `ScriptListener.8li` plugin to your Photoshop plugins folder
typically located in `C:\Program Files\Adobe\Adobe Photoshop
[VERSION]\Plug-ins\`.
   - Restart Photoshop. From now on, Photoshop will log every action you take in the UI
to a file.

2. **Capture the Required Commands:**
// Main function
function focusStackEveryFour() {
  var inputFolder = Folder.selectDialog("Select a folder of images for focus stacking");
  if (!inputFolder) return;

  var fileList = inputFolder.listFiles(function(file) {
    return (file.basename.endsWith('.jpg') || file.basename.endsWith('.png') || file.basename.endsWith('.tiff'));
  });

  for (var i = 0; i < fileList.length; i += 4) {
    var filesToOpen = [fileList[i], fileList[i + 1], fileList[i + 2], fileList[i + 3]];
    var doc = loadFilesIntoStack(filesToOpen);
    if (!doc) continue;

    alignLayers(doc);
    blendLayers(doc);

    var saveName = inputFolder + "/Stacked_" + Math.floor(i / 4) + '.tiff';
    saveAsTiff(doc, saveName);
  }
}

function loadFilesIntoStack(files) {
  var i = 0;
  var file = new File(files[i]);
  app.open(file);

  var docRef = app.activeDocument;

  for (i = 1; i < files.length; i++) {
    file = new File(files[i]);
    // var layer = docRef.layers.add(); // no need to make blank layers
    app.activeDocument.activeLayer.duplicateLayer(docRef, ElementPlacement.INSIDE);
    app.activeDocument.close(SaveOptions.DO_NOT_SAVE_CHANGES);
  }

  return docRef;
}

function selectAllLayers() {
  var desc29 = new ActionDescriptor();
  var ref23 = new ActionReference();
  ref23.putEnumerated(charIDToTypeID('Lyri'), charIDToTypeID('OrdN'), charIDToTypeID('Trgt'));
  desc29.putReference(charIDToTypeID('RefTo'), ref23);
  executeAction(stringIDToTypeID('selectAllLayers'), desc29, DocumentNode.ND);
}

function alignLayers(doc) {
  selectAllLayers();
  var idAlign = charIDToTypeID('Align');
  var desc224 = new ActionDescriptor();
  var idnull = charIDToTypeID('null');
  var ref4 = new ActionReference();
  var idlyr = charIDToTypeID('Lyri');
  var idordn = charIDToTypeID('OrdN');
  var idtrgt = charIDToTypeID('Trgt');
  var ref4.setEnumerate(idlyr, idordn, idtrgt); desc224.putReference(idnull, ref4);
  var idalign = charIDToTypeID('Align');
}