

This workbook is an accompaniment to the Design Thinking for Educators Toolkit, available for free at [designthinkingforeducators.com](http://designthinkingforeducators.com).

# ***Designer's Workbook***

***Design  
Thinking  
for  
Educators***

**MY DESIGN CHALLENGE:**

***Design  
Thinking  
for  
Educators***

## What is Design Thinking?

Design Thinking is about believing we can make a difference, and having an intentional process in order to get to new, relevant solutions that create positive impact.

Design Thinking gives you faith in your creative abilities and a process for transforming difficult challenges into opportunities for design.

Design Thinking is:  
**human-centered**  
**collaborative**  
**optimistic**  
**experimental**

## Welcome to the Designer's Workbook.

This workbook includes step-by-step instructions for completing a design challenge using the design thinking process. This workbook is a quickstart guide to the design thinking process and is best used in combination with the Design Thinking for Educators Toolkit.

The Design Thinking for Educators Toolkit contains in-depth instructions and explanations as highlighted by each step in this workbook. The toolkit also provides you with examples from educators, like yourself, of how they've been using design thinking in their work.

**THIS WORKBOOK CAN SUPPORT ANY DESIGN CHALLENGE YOU WANT TO TACKLE. THOUGH WE OFTEN SEE CHALLENGES THAT CENTER AROUND A FEW SPECIFIC TOPICS:**



### CURRICULUM

Every day you design ways to interact with your students around content. You can follow a design process to be more intentional about connecting this content to the interests and desires of today's learners by finding out more about the things that they do outside of school and connecting that to the content you are bringing to them.



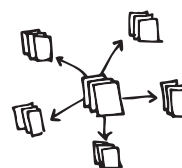
### SPACES

The physical environment of the classroom sends a big signal about how you want your students to behave. Right now we tend to think of our classroom spaces as standard... kids in rows, sitting in desks. By rethinking the design of our spaces, we can send new messages to our students about how they should feel and interact in the classroom.



### PROCESSES & TOOLS

Your school has already designed a set of processes or tools that may or may not be setting up your school for success. This is typically outside of the classroom and specific interactions around learning, and more around how the system operates. Every process is already designed, and thus can be redesigned! Sometimes creating tools can be essential to supporting newly designed processes.



### SYSTEMS

Not everyone can always make decisions for the system that they exist within, but everyone can contribute to the design of that system. Designing systems is about balancing the complexity of many different stakeholder needs with the needs of the operation. When designing systems, we're often setting high-level strategy such as stating visions, priorities, policies, and key communications around these ideas.

## ***Hello Designer!***

Whether this is your first design project or your fiftieth, you are taking a brave step to address challenges in your classroom, school or community by designing new solutions that build from people's needs and desires. Exciting!

This workbook is meant to help you structure your process and capture your thoughts. Use it how it best helps you... you can use some of the methods or all of the methods, it's up to you.

First step... define your challenge and create a project plan.

# Getting Started

## **WHAT'S IN THIS SECTION**

**0-1 *Define a Challenge***

**0-2 *Create a Project Plan***

**0-3 *Create a Project Plan***



## 0-1 Define a Challenge

### Dreams and Gripe Session

Finding opportunities for design often begins by noticing problems. Sometimes it comes out as wishes ("I really wish our school had \_\_\_\_.") Sometimes it comes out as complaints ("It annoys me that we're not \_\_\_\_.") Either starting point is fine. You might want to try this with a friend... share your dreams and gripes and ask them to reflect back design opportunities.

#### DREAMS/THINGS I WISH WOULD EXIST

Currently, there is no industry exposure for the students studying in our school.....  
To understand how business works, students should be given cognizance on corporate work culture and latest technologies. Keeping this scenario in mind, I wish our school had an association for students to communicate with the industry experts which will help them to apply the knowledge delivered by industry experts into practical application. Association should provide a certificate of completion that will guide students in their future endeavors.

#### GRIPES/THINGS THAT COULD BE BETTER

As a graduate student, I want to join a student organization which will help me positively in my student experience and career growth while getting a graduate degree. It annoys me that I don't have an association which helps me to interact with industry speakers who are working in the real world. An association which help me get networking opportunities, to be able to apply skills which I have learned in the class. I really feel like that I am losing competitive edge when I see other students from other schools that how they are engaging with diverse groups of people.

Next, flip these statements into possible design challenges. Begin your question with "How might we..." or HMW for short. This turns the problems you see into opportunities for design!

#### HOW MIGHT WE...

- Formation of an association to organize an event for students based on different domains.
- Interaction with the industry experts through social media like LinkedIn, Facebook, Twitter, etc. for connecting the students.
- Creation of common portal to get a student registered for the event.
- Events organized by the association will provide certificate that will aid a student an Internship opportunity.

#### HOW MIGHT WE...

- > Formation of an association which will help the students interact with the top industry speakers and provide them knowledge about the field of study.
- > Create a web portal where students can register themselves for the events and get all the information about the upcoming events, future events, Industry speakers, location and so on.
- > Development of a chat bot, to solve the queries of student for which solution is not provided on the portal.
- > Linking our portal with YouTube so that student who has missed any past event can see the recording for that event.



## 0-2 Create a Project Plan

### Sketch out the End Goal(s)

What will I work to produce?

#### END GOAL(S)

- ☐ Highly qualified and experienced industry experts will be guiding the students.
- ☐ Coordinators of the student association will be responsible for the student's registration and queries and every student will be provided with an entry pass for attending the sessions.
- ☐ Proper working website for students will be developed to sign up for the sessions by industry experts.
- ☐ An autogenerated emails will be provided students for confirmation, cancellations, discounts/referral codes, etc.
- ☐ Virtual assistance will be provided to students through chatbots for their regular communication.
- ☐ Every session delivered by industry experts will be uploaded on the YouTube which will be public where students and guest users can subscribe to our association's channel.
- ☐
- ☐

### Define Indicators of Success

What measures and indicators will help me know my ideas are successful?

#### MEASURES

- ☐ Website successfully deployed by the estimated time and budget.
- ☐ Students got information through social media and school website.
- ☐ Number of students registered vs Expected registrations
- ☐ Number of active users vs number of number of registered users.
- ☐ Minimal complaints regarding registrations for organized events.
- ☐ When we can easily solve the issues of students on chatbots.
- ☐ Satisfaction surveys reflecting positive responses.
- ☐

### Establish Constraints

What constraints will I need to manage?

#### CONSTRAINTS

- ☐ Insufficient skills and training for the team members.
- ☐ If radius is more than 10 miles then students require to manage transport by their own.
- ☐ Absence of platform/forum for the exchange of ideas
- ☐ Lack of transparency in management and decision making by project team
- ☐ Lack of participation and communication between students and industry experts for the events.
- ☐
- ☐
- ☐
- ☐
- ☐
- ☐

#### OTHER THINGS TO KEEP IN MIND

We should maintain and increase the satisfaction level of the students by providing answer to all their questions.

Prepare students to face the real world by increasing their confidence and motivation level.

As the budget for the association is limited ,we have to some approaches to gather funds.



## Write a Brief

Write up a short "brief" that clarifies the challenge you'd like to address. Write it as if you were handing it to someone else to design with. Capture thoughts on why this is a problem, and what the opportunity for design will be.

### BRIEF

There are various challenges we came across while designing this project.

The first encounter was how we might make student interact with the exterior world.

This is the most important issue which is faced in most of the colleges.

Before stepping into the IT industry everyone wants to have some knowledge about it.

To solve this problem we decided to make an association along with web portal and chat bot facility.

Web portal will act like an interface between the student and exterior world.

We will invite talented speakers from all over the industries to speak about latest technology and provide practical learning to the beginners.

By attending the events and listening to various speakers will increase the confidence level of the students and keep them motivated.

Chat bot facility will also be introduced to guide the students with all the queries and suggestion.

## How Might We!

Capture the design challenge you've decided to work on...

### CHALLENGE QUESTION

- 1)How might we make students interact with the outside world?
- 2)How might we increase the practical learning among the students?
- 3)How might we keep the students motivated and increase their confidence level?
- 4)How might we increase the satisfaction level of the students?
- 5)How might we use the knowledge and ideas of students?

### WHAT KIND OF CHALLENGE IS THIS? (CIRCLE ONE)



CURRICULUM



SPACES



PROCESSES  
AND TOOLS



SYSTEMS

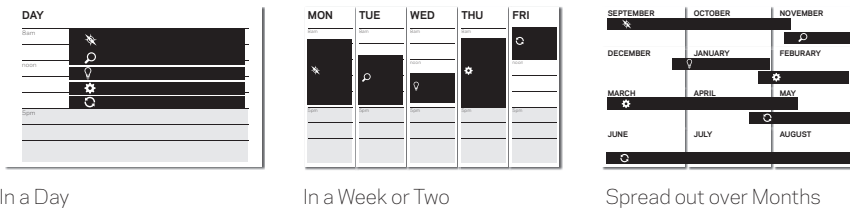
### TIP

Keep the challenge simple and optimistic. Make it broad enough to allow you to discover areas of unexpected value, and narrow enough to make the topic manageable.

## 0-3 Create a Project Plan

The Design Thinking process is flexible and can integrate into your school structure and timing. The process can be run in a day, a week, a year, or more. What you put into the challenge determines what you get out of it. The depth of insight, opportunity areas, and level of concept refinement and impact will vary depending on the length of your project. For now, choose the timeline you'd like to begin working with. After getting started on the project, you may find that you'll want to evolve this plan to meet the needs of your design solutions.

## Circle your Design Plan



## Sketch your Timeline

Create a timeline for your project. What are major dates you'll be working toward? Do you need a prototype to be ready for use after summer break? Do you want to share learnings at parent-teacher night or pitch your concept to the school board? Consider deadlines, meetings, and interim check-in dates.

## Project Checklist

What do you need to get in place to enable you to get started on this project? Do you need to align schedules to conduct a challenge on a professional development day? Do you need to book space or request materials? Who do you want help from?

## CHECKLIST

- |  |                 |
|--|-----------------|
| <input type="checkbox"/> Deliverables (goals and objectives) identified?   | Coordinator     |
| <input type="checkbox"/> Schedule, Scope and budget identified?  | Business Unit   |
| <input type="checkbox"/> Is there a project manager assigned to the project organization?  | Project Manager |
| <input type="checkbox"/> Training and development of project manager and staff is adequate?  | Students        |
| <input type="checkbox"/> Are the resources assigned with appropriate tasks? Roles identified?  |                 |
| <input type="checkbox"/> Software specification documentation is sufficient?   |                 |
| <input type="checkbox"/> Manageable risk?  |                 |
| <input type="checkbox"/> Quality management and analysis defined?  |                 |
| <input type="checkbox"/> What opportunities are evolving from the project?   |                 |
| <input type="checkbox"/> Does the project organization have representation for management, functional specifications and business unit? Are they understandable? |                 |

TO HELP ME WITH PLANNING, I WILL ENGAGE:

Coordinator

## Business Analyst

Project Manager

## Students and Staff



I WANT TO COMPLETE THE FIRST ITERATION OF THIS PROJECT BY:

***Great!***

***You have now defined a design challenge to create new solutions for, and have sketched a work plan for you and your team.***

***Now you are ready to move on to the first phase of the design process... Discovery.***



# 1

## DISCOVERY

### WHAT'S IN THIS SECTION

- 1-1 Understand the Challenge***
- 1-2 Prepare Research***
- 1-3 Gather Inspiration***





## 1-1 *Understand the Challenge*

### Review the Challenge

What are some things your team identified about the current design challenge? Capture key thoughts, constraints, and barriers from the discussion.

#### THOUGHTS, CONSTRAINTS, BARRIERS

We have identified that we need highly qualified and experienced industry professionals who will guide students with current technologies.

It is determined that students require appropriate workbench for registration of sessions by industry experts

Chatbots will be established to supply virtual assistance to the students

Effective coordination and management between project team.

Takeaways from the events should benefit students in their future endeavors.

Positive responses from all students attending sessions reflecting satisfaction ratio.

Chatbots should help students solve their queries.  
If radius is more than 10 miles then students have to manage transport on their own.

Lack of participation and communication between students and industry experts.

Insufficient skills and training for team members.

Absence of platform /forum for exchange of ideas between core team.

Lack of transparency in management and decision making by project team.

Did your group rewrite the challenge after your discussion? If so, capture it here:

#### HOW MIGHT WE...

We will prepare a questionnaire for students to understand their challenges and how to overcome those.

We will arrange quizzes and provide refreshments at end of the events.

### Share What you Know

What do you believe you already know about this challenge? What would you like to learn more about? Capture your assumptions, and your questions.

#### I ALREADY KNOW

We are building an association where students will be imparted

knowledge on current market trends from the professionals.

As we already know that there is a website where students can

register for events where they can communicate with the industry

experts. We are also aware that professionals from industries will

be guiding the students on the latest technologies.

#### I WANT TO KNOW MORE ABOUT

We want to know more about the association whether the sessions

will help the students for their future career path. Also, we want to

know more about the working of chatbots whether it will help the

students resolve their queries whenever they need. We need to explore

around the transportation facilities whether the association will

be providing to the students. We need more information about the

upcoming past and future events along with their time and venue

through the portal. In case, a student misses any particular event then their should be a way where they can look for the previous

events held by our association.



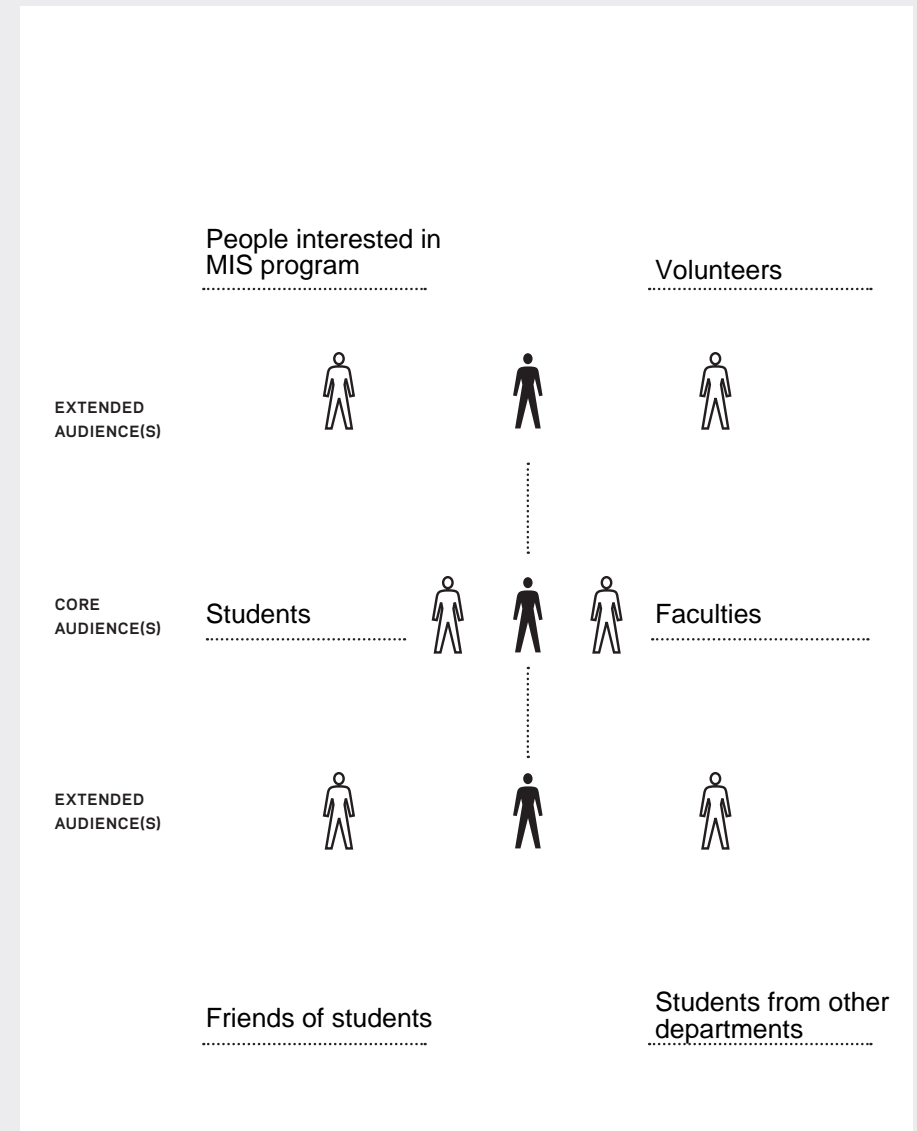
## Build your Team

Who is on your team? Who are core members and who are extended members? Through your discussion, what did you determine about the roles that people will play and the unique goals that you each have?

CORE TEAM MEMBER(S)	GOALS AND ROLES
Tanmai Aurangabadkar	Framing and Market Research
Era Kajal Singh	Design Research, Evoke Stories: Persona Building, Applying Framework
Himani Verma	Point of view, Problem statements, how might we research
Neha Gupta	Ideate process, Identifying Needs using CO CAP matrix, breaking problem into sub-problems
EXTENDED TEAM MEMBER(S)	GOALS AND ROLES
Volunteers	Volunteer are the people who will help in organizing the events and helping to make necessary arrangements
Speakers	Industry experts are the people who are working on real time problems related to the field for a long time. They have enough experience to be able to guide students of MIS with their gained knowledge and expertise

## Define your Audience

Who will you be designing for? Consider the core audience and extended audience. Draw a visual reminder.





## 1-2 *Prepare Research*

### Identify Sources of Inspiration

Who are all of the people involved in your topic? Who might represent extreme behaviors related to your topic? Which experts do you want to meet with to learn more about your topic? List the candidates that you think will provide the most inspiration and circle 3-5 that you want to engage with first.

#### USERS, EXPERTS, EXTREME USERS

Students, Staff and Faculty members, Industry Experts, Other Association members

Coordinators and other corporate organization are people involved in our topic.

Students and industry experts might represent extreme behaviors related to the topic

According to us, we will prefer to meet corporate professionals with good experience

who can share the latest technical ideas, other club members with whom we can learn the planning strategies of the event and students from the school who can help us to know the

problems they are facing in the learning process.

Candidates who can provide the most inspiration comprises of -

1. Other Association members: They will help us building our association with proper planning and management of activities.

2. Students: They will provide us with the information of their areas of interests. Accordingly, we can proceed with proper methods of guidance.

3. industry Experts: Experts from corporate organizations will provide us with the information about latest technologies as well as provide some professional contacts.

4. Coordinators: They will coordinate the project and perform managerial activities.

### Identify Places of Inspiration

Where can you go to have an inspiring experience related to your challenge? What are analogous settings or extreme experiences where you might witness similar or relevant behaviors and activities in a different context? List as many locations as you can and circle 3-5 that you are most excited to observe first.

#### INSPIRING LOCATIONS, ANALOGOUS SETTINGS

There are different inspiring experiences related to our challenge defined such as Schools, Other Associations and Other corporate organizations. Toastmasters International is a club for building communication and leadership development. The goal is to make up global network of meeting locations. Our association also concentrates on building global connections during organized events. Toastmasters International Club emphasizes on giving speeches, leading teams and guiding others to achieve their goals. In the similar way, our association has industry experts who guides the students with the latest technological updates and help achieve their career goals.

Schools - Students at the schools will provide their areas of interests which will help our association to analyze and develop the events accordingly.

Other associations - They will help us engage in better understanding of building an association and planning of events.

Other Corporate organizations - They will guide us with the current business process understanding as well as provide updates on latest technologies.



## Select Research Participants

Who specifically do you want to talk to and learn from? Create detailed descriptions for at least 3 different users or sources of inspiration. Be sure to cover a variety of gender, experience, ethnicity, etc.

USER TYPE Student

### USER DESCRIPTION

A student who is enrolled in MIS program and intend to join the industry as a MIS graduate and wants to understand :

1. What are the roles and responsibilities at work?
2. Challenges at work.
3. How to enhance the professional network?

USER TYPE Volunteer

### USER DESCRIPTION

Volunteer are the people who will help in organizing the events and helping to make necessary arrangements.

For ex:

1. They can help by serving helpdesk.
2. They can help in guiding students to the presentation and workshop locations
3. They can help with serving snacks
4. They can help with setting technical equipments

USER TYPE Industry Expert

### USER DESCRIPTION

Industry experts are the people who are working on real time problems related to the field for a long time. They have enough experience to be able to guide students of MIS with their gained knowledge and expertise

Further experts will have:

1. Intent of sharing experiences
2. Interest in giving back to community by passing on their knowledge

USER TYPE

### USER DESCRIPTION



## Build a Question Guide: Interview

What do you want to learn to better understand the challenge at hand? What are you hoping to understand about people's motivations and frustrations? What do you want to learn about their activities?

### START SPECIFIC

What are some specific questions you can ask to open the conversation?

What's your name and What school

are you in?

What type of teaching would you prefer?

What challenges do you face while

learning in the class?

What would you suggest to overcome

these challenges?

If you get a chance to attend any event

offcampus, are you ready for it?

If yes, what kind of events do you prefer?

How much aware are you about the

latest technologies?

Are you willing to travel to attend the event?

Are you aware about chatbots?

### GO BROAD

What are some questions that can help you start to understand this person's hopes, fears and ambitions?

What are the expectations from a professor?

What can be the takeaways from the

association?

Which domain you are scared of ?

Do you have any trouble in understanding

any topic?

What is your strong desire in life?

What are your career plans?

Enlist your achievements so far?

### INTERVIEWEE NAME

Nishigandha

#### TIP

Make a copy of this for each interview.

### PROBE DEEP

What are some ways you might be able to dig deeper in the conversation,, to find even more of the perspective this person has?

What technologies you prefer?

According to you, what is the way to get deeper knowledge of any particular topic ?

What structure do you want for understanding any particular concept?

What are your expectations from the events of our association?

What guidance do you want from our association?

Kindly explain your design for the syllabus?

Do you need any transport facility from us?

Do you know how to use chatbots and how they work?

What type of explanations you need from the industry experts?

Do you require any events other than technical?

Any requirement on understanding the work culture of an organization?



## Build a Question Guide: Observation

What are you looking to learn in this observation? Capture themes and questions that you want to make sure you get to in the site visit! Fill in one of these worksheets for each observation, so that you can consider what you will ask for each place you are visiting.

### THINGS TO SEE

What are some things you want to make sure you observe while you are visiting this place?

1.How much students are motivated to join the association?

2.If students will join the events organized by the association?

3.Will such events will fit in the student's schedules?

4.How can we motivate the students to come to the events?

5.What do expect from the web portal?

### OBSERVATION SITE

### THINGS TO DO

What are some things you can do to gain inspiration in this place?

1.Probe students in the interview to understand how students manage their classes and work today for helping us to find right schedule for our events .

2.Ask students what do they feel is missing in their college experience to find out if they are motivated to join the association

3.Share our plans about workshops, training to see how well students reacts

4.Ask questions like if they had association today, how soon they would join the association.

#### TIP

Make a copy of this for each observation.



## Prepare For Fieldwork

Assign responsibilities before going into the field. Who is in charge of confirming date, time, and location of the research activities? Who is responsible for making sure you have all the necessary equipment? Who will take the lead in interviewing? In documenting?

TEAM MEMBER	ROLE
Era Singh Kajal	In charge of confirming date,time and location
Tanmai Aurangabadkar	Responsible necessary equipment
Neha Gupta	Lead in Interviewing
Himani Verma	Lead in documentation

LOCATION OR INTERVIEWEE	ADDRESS, DATE AND TIME
Aryan	Bangalore, India Date: 11/03/2017 , 5.00 am
NishiGandha	Long Beach,California Date: 11/4/2017 , 3:00 pm

### CHECK LIST

- ☐ QUESTION GUIDE
- ☐ PARTICIPANTS CONTACT DETAILS
- ☐ TEAM MEMBERS' CONTACT DETAILS
- ☐ DIRECTIONS TO LOCATION
- ☐ NOTEPADS AND PENS
- ☐ CAMERA (CHECK BATTERIES)
- ☐ MOBILE PHONES
- ☐ THANK YOU GIFTS FOR PARTICIPANTS (IF APPLICABLE)
- ☐ POST-IT NOTES, SHARPIE MARKERS
- ☐ Quizes
- ☐ Certificates
- ☐ Resume Building
- ☐ Workshops
- ☐ Networking
- ☐
- ☐
- ☐



## 1-3 *Gather Inspiration*

### Inspiration Notes

NAME OF PERSON INTERVIEWED/LOCATION VISITED

Aryan Kuntal

#### TIP

Fill this out of this for each interview.

#### OBSERVATIONS AND QUOTES

Aryan kuntal is a bachelor in computer science and lives with his family.

He is currently pursuing his masters in Information System.

His main goal is to get industry exposure. He want a platform or podium that can provide him practical learning and future career path. In addition, he suggested that if there should be an association, which can bring in industry experts to provide knowledge about latest technologies and guide them for the future.

He consider that most of the lectures in colleges are theoretical and non-interactive. He says that if we had to learn only the theory, it is better to sit at home and do the course yourself instead of going to college.

His point of vision is that knowledge should be a combination of both theoretical and practical. He quoted to succeed in life one has to proactively reactive.

#### INTERPRETATIONS

In today's world most of the colleges are giving more prominence to theoretical knowledge rather than practical. Theoretical knowledge helps you understand why one system works and other fails whereas practical knowledge gives you deeper understanding of the concept. Most of the lectures are usually long lectures of presentation with no interactive sessions The association will focus on giving them practical knowledge about the latest technologies. Industry speakers will come up with random quizzes to make the session collaborative and interactive.

During the events, industry experts will come up with the internship offers which will help students for the future career path.

This will also keep them motivated. There will be sessions in which students will be asked to come up on the podium to share their ideas. This will increase their confidence level.

**AS YOU ARE INTERVIEWING,** capture what you see and hear during a field visit. Capture direct quotes. Separate your observations from your interpretations so that you know what you saw and what you thought it meant for

that person. Look for work-arounds and adaptations people have made to make a system to serve their needs better such as books stacked under a laptop to make the screen a better height for viewing.





## 1-3 Gather Inspiration

### Inspiration Notes

NAME OF PERSON INTERVIEWED/LOCATION VISITED

Nishigandha

#### TIP

Fill this out of this for each observation.

#### OBSERVATIONS AND QUOTES

As per the interviewee, she prefers teaching with practical orientation with support of some problems. She claims that the events conducted by the association should be interactive one.

She says that syllabus of the school looks outdated to her. Hence, she would require updates on the latest technologies. She thinks that explanations provided by the industry experts should be done on the blackboard as it will help in analysing the knowledge of the industry expert. Every concept taught by the expert should be explained with some real time examples.

She also adds that events provided by the association should be meaningful and learning given by the experts should help her improve her skillset. She suggests that association should provide some references such as books, videos, audio materials, etc. in order to

know more about the latest technologies. She states that she is aware upto 50% of the latest technologies and requires more awareness about the current market demands.

She expects that association should have some debates or quizzes that would keep the atmosphere collective.

She is ready to manage her own transport in order to attend the events if she gets useful information from the events. She mentions that she is aware about the chatbots which are nothing but virtual assistants to get any particular information.

**AS YOU ARE INTERVIEWING,** capture what you see and hear during a field visit. Capture direct quotes. Separate your observations from your interpretations so that you know what you saw and what you thought it meant for

that person. Look for work-arounds and adaptations people have made to make a system to serve their needs better such as books stacked under a laptop to make the screen a better height for viewing.

#### INTERPRETATIONS

Our association will provide practical training for the students. The industry experts should perform the event as a give and take session. The syllabus should be based on current market trends and students should be given hands on experience on how to use these technologies.

Every concept of any particular topic delivered by the industry expert should be properly elaborated on the board with real time examples. The cognizance given by the industry experts should help the students to build up their proficiency in handling the new technologies.

The association will focus on conducting workshops that will have video sessions describing the technologies as well as some of the reference books that will guide the students to understand those new technologies. To make the students more aware of the new technical ideas, our industry experts will be sharing the latest ideas available in the market. Industry experts will be having pop up quizzes in between the sessions to keep the environment an interactive one. As the sessions will be very helpful which will help them enhance their knowledge, students will be eager to join the event on their own. A basic idea about the usage of chatbots will be provided by our experts so that students can easily understand the concept of virtual assistance.

***Through the Discovery phase, you have gained deeper understanding, empathy, and inspiration for your design challenge.***

***Through Interpretation, the second phase of the design process, you will now make meaning and define insights from your Discovery observations and interviews.***



# 2

## INTERPRETATION

### WHAT'S IN THIS SECTION

***2-1 Tell Stories***

***2-2 Search for Meaning***

***2-3 Frame Opportunities***



## 2-1 *Tell Stories*

### Capture Your Learnings

Immediately after interviewing, be sure to capture your learnings. Capture one observation, story highlight or quote per post-it note. Use the prompts to guide you.

WHO DID YOU MEET? (PROFESSION, AGE, LOCATION, ETC)

Nishigandha (Student,24,Alhambra)

What was the most memorable and surprising story?

The most memorable and surprising story we found is that explaining each and every topic by the industry experts should not only have real time examples but also have small tasks/assignments associated with it.

What was interesting about the way he/she interacted with his/her environment?

She delineated the approach of our association that how exactly it works and what are the different means by which others can get connected and become the part of the association.

What did this participant care about the most?  
What motivates him/her?

The participant is most concerned about the practical orientation provided the industry experts for the latest technologies. She has keen interest for the technical based events which includes quizzes, debates and workshops. Her motivation for attending our event conducted by the association is to build up the strong network with students and professionals.

What frustrated him/her?

The participant has to manage her own transportation every time in order to attend the events conducted by our associations.

What questions would you like to explore in your next conversation?

Would you be interested in meeting the industry experts and knowing their experiences?

Do you think an association can help you achieve your future goals?

Do you think consulting the industry experts can help you achieve your goals successfully?

What changes do you prefer in the current set up of the association?



## Share Inspiring Stories

Take turns sharing stories of the people you talked to or the places you visited. While listening to your team, capture their stories and observations on post-it's, using a separate post-it per thought. Capture the most interesting learnings here.

Learnings from my partner/team:

Nishit , a part time student of CSULA wants someone to guide him for the future career path.

But he never for an opportunity to be a part of an association where he can get guidance for future career path.

Learnings from my partner/team:

Roshika chabbra rocked the academic world with the 4 GPA but at the time of the exposure to the outside world she lacked the critical thinking and was not offered any internship. This story of her proves that apart from the bookish knowledge it is very important to have the industry exposure to survive in the IT world.

Learnings from my partner/team:

Learnings from my partner/team:

One of my patner wanted ot share her knowledge but never got any platform to speak about it. She wanted to discuss her ideas in public and have a discussion with some of the experts. This observation clicked my mind to come up with a Association where industry speakers can speak up about some interesting topics and students can have a discussion and share their ideas.

Learnings from my partner/team:

Aryan kuntal , a 4 GPA in bachelors , curretly pursuing his masters in information system. He want a platform which can provide him industry exposure and practical knowledge. Despite being considered as one of the bright student he was not offered any internship. He thinks that lack of industry exposure is one of the reason.

Learnings from my partner/team:



## 2-2 Search for Meaning

### Find Themes

Look for themes, patterns and connections across your wall of post-it notes. Cluster related post-it's around themes that you notice. It's like moving your thoughts around and seeing new patterns as a result. Create headlines for each category that capture these themes and patterns.

#### HEADLINES

- 1.Snacks menu – We will keep option for healthy vegetarian and non-vegetarian diet. Snacks and drinks will be provided to the students with minimal cost (Snacks will be optional)
- 2.Workshops Events – Quizzes,debates,forums,etc. will be included in workshops where industry experts will be providing knowledge on latest technologies and students will get hands on experience on them.
- 3.Campus Events – We will be discussing with career development center regarding our upcoming events and also provide information about technologies the experts are going to be teach.We will be advertising about our events through school community newspapers and posters.
- 4.Industry Expert office hours – We will setting up a meeting to discuss with the industry experts regarding the latest technologies they will be teaching. once a week during their office hours.
- 5.Chatbots – On the student's registration portal, chatbots will be guiding the students with their queries and suggestions.

### Make Sense of Findings

Take a closer look at your themes and find overlaps, patterns and tensions as they relate to each other. Can you group several related themes in larger categories?

#### WHAT ARE THE LARGER CATEGORIES?

Workshops and campus events are the themes that can be grouped in larger category of “Events” where all the campus events along with workshops can be advertised through school community newspapers and posters.

Did you find any contradictions? Did you have any unexpected learnings or find something that felt surprising? Why?

After having discussed with your team, and/or gotten feedback on the categories, what are you excited to dig deeper into?

#### UNEXPECTED LEARNINGS

No, we didn't find any contradictions. But, we found something unexpected which made us felt surprising.The unexpected learning is that explaining each and every concept with examples and tasks is a very difficult job and time consuming.

#### I AM EXCITED TO EXPLORE...

After discussion among the team members and as per student's feedback, our main aim is to focus on how to make sessions more interactive and knowledgeable for the students which will be conducted by the industry experts.Our vision will be getting more deeper understanding about how can our association help students in order to achieve their future goals.



## Define Insights

Insights are a concise expression of what you have learned from your research and inspiration. They are the “aha” moments and unexpected learnings.

Sometimes, it can be helpful to write an insight in the form of a Point-of-View (POV) statement which makes an insight specific to a user or user group. A simpler way to create a POV is through the POV equation.

*user + need + interesting learning = POV*

### INSIGHT/POV

Students want practical training and industry exposure.

### INSIGHT/POV

Students want someone to guide them for the future career path..

### INSIGHT/POV

Students want to connect with industry experts and the students with the same interest.

### INSIGHT/POV

All users need reminder for the sessions.

## 2-3 Frame Opportunities

### Make Insights Actionable

Actionable and successful ideas start with the right question, which identifies important opportunities through great INSIGHTS. Remember, each “How might we” (HMW) question will only address a portion of your challenge so you can create multiple HMW's and prioritize them for ideation.

#### TIP

Avoid brainstorm questions that already imply a solution.

Is your question...



BROAD ENOUGH TO SPEAK NEW IDEAS?



NARROW ENOUGH TO FEEL MANAGEABLE?



FOCUSED ON RESPONDING TO YOUR USER-DRIVEN INSIGHT?

### HOW MIGHT WE...

1)How might we make students interact with the outside world?

2)How might we increase the satisfaction level of the students?

3)How might we use the knowledge and ideas of students?

4)How might we increase the networking among students?

5)How might we increase the practical learning among the students?

6)How might we provide them the reminders for the sessions.

.....

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## Create a Visual Reminder

Frameworks, diagrams, and illustrations are great tools for communicating insights or complex information.

### THINGS TO TRY

Map out the network of connections—people, actions, objects, interactions. Illustrate activity or information flow.

Map the actual/figurative journey that people or things take.

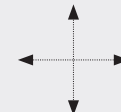
### Journey map



### Venn diagram



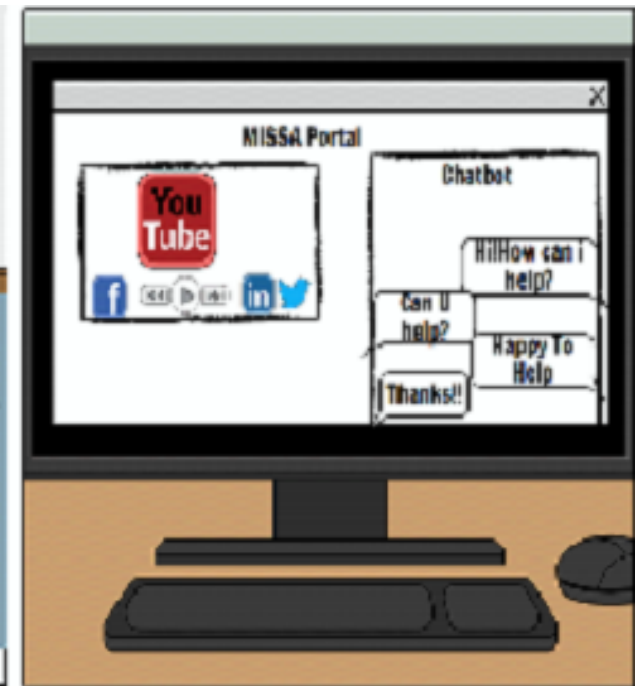
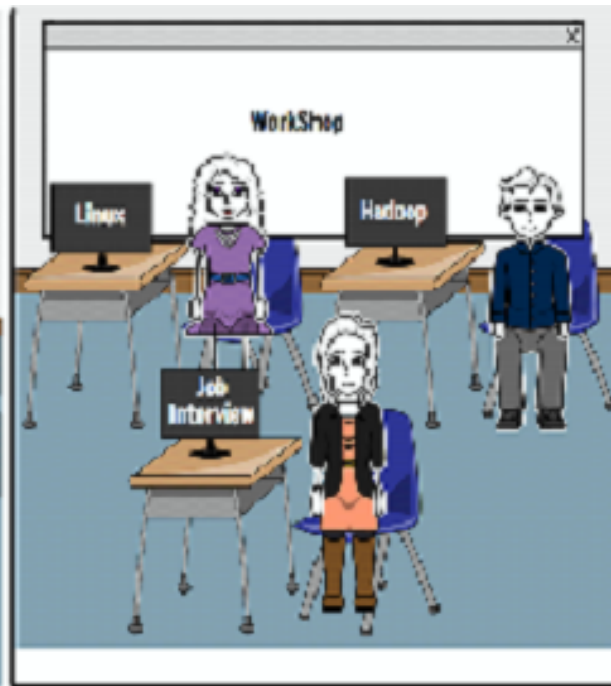
### Two-by-two



### Relationship map



SKETCH OR CREATE A VISUAL THAT WILL HELP EXPRESS YOUR INSIGHTS.



***Now that you've created a point-of-view and framed opportunities for your design challenge, you are ready to move to the third phase of the design process...Ideation!***

***Ideation will help you come up with many possible design solutions to address your challenge.***



# 3

## IDEATION

### WHAT'S IN THIS SECTION

**3-1 *Generate Ideas***

**3-2 *Refine Ideas***





## 3-1 *Generate Ideas*

### Prepare for Brainstorming

A successful brainstorm session requires planning. The small details matter. Invite a diverse group of people who can stay open-minded and can build on each other's ideas. 6-10 is ideal for a brainstorm. Who will you invite?

#### NAMES

Nishigandha

Ann

Denis

Nitesh

Greg

Krishna

Divya

Sufficient wall space is necessary to have room for everyone to get up and see each other's ideas, and will leave you with room to post plentiful ideas. Where will you conduct the brainstorm and how will you set-up the space to facilitate a brainstorm?

#### ROOM SET-UP

We will be conducting the brainstorm session in a student hall where all students will gather together. They will find alternative solutions to the problems of the project. We will be setting up the space by creating a small circle where all students can express their ideas and facilitate a brainstorm.

#### CHECK LIST

☐ Paper

☐ Pen

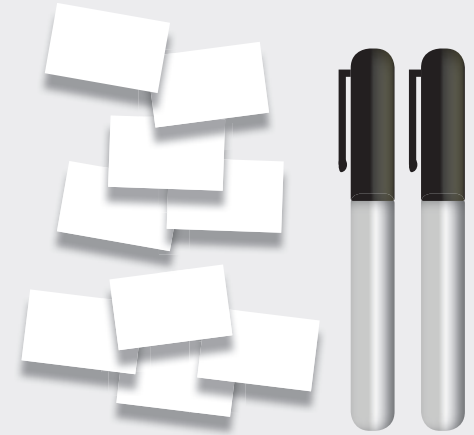
☐ Chairs

☐ Markers

☐ Laptop

☐ Snacks

☐



POST-ITS

MARKERS



#### SNACKS

(never underestimate the power of sugar in a brainstorm!)



PAPER

#### BRAINSTORM RULES

1. DEFER JUDGEMENT
2. ENCOURAGE WILD IDEAS
3. BUILD ON THE IDEAS OF OTHERS
4. STAY FOCUSED ON TOPIC
5. ONE CONVERSATION AT A TIME
6. BE VISUAL
7. GO FOR QUANTITY

POST THE BRAINSTORM RULES.



## Facilitate Brainstorming

Create, or use some of the suggested warm-up brainstorm questions from the Facilitate Brainstorming method to get people in the right mood. Which questions will you use?

### WARM-UP QUESTIONS

1) We will ask the team members what they would do if they were the

head for the student association.

2) We will ask them the opposite i.e. the reverse thinking of what they

would actually do?

3) We will ask them to write their own ideas then rotate them within the group and build off each other ideas.

4) We will ask them to start with the goal in the center and branch- up into as many sub- topics as needed.

Which topic will you focus your brainstorm on?

### TOPIC

The brainstorming will focus on three main categories: physical product, online offering and the In person engagement.

Which HMW brainstorm questions will you use?

### HOW MIGHT WE...

How might we make students interact with the outside world?

How might we increase the satisfaction level of the students?

How might we increase the satisfaction level of the students?

How might we increase the networking among students?

How might we increase the practical learning among the students?

## ***Feeling stuck?***

Here are a few other things to try:

### **Add constraints**

Change the magnitude of the solution space, using size, price, time commitments, and count. Ask yourself, "What if... it was larger than this room? smaller than a peanut? took 5 years to implement? took 1 minute? was available for all? available for only a few?"

### **Use inspiring brands.**

Ask yourself, "How would McDonald's, Nike, Apple, Urban Outfitters, or Disney do it?"

### **Make it time-specific**

Ask yourself, "What if it were made for the morning? night?"

### **Hone in on a target audience**

Ask yourself, "What if it were only for tweens? kids? athletes? parents?"

After you brainstorm, cluster any related ideas and have the team pick their 3 favorite ideas.

[illegible]

The ideas which received the most votes are-

1. Certificates provided after the sessions-

Students are getting certificates after the end of the sessions that will help them to add on the resume which will be highlighted on their resume.

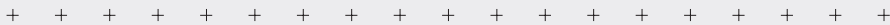
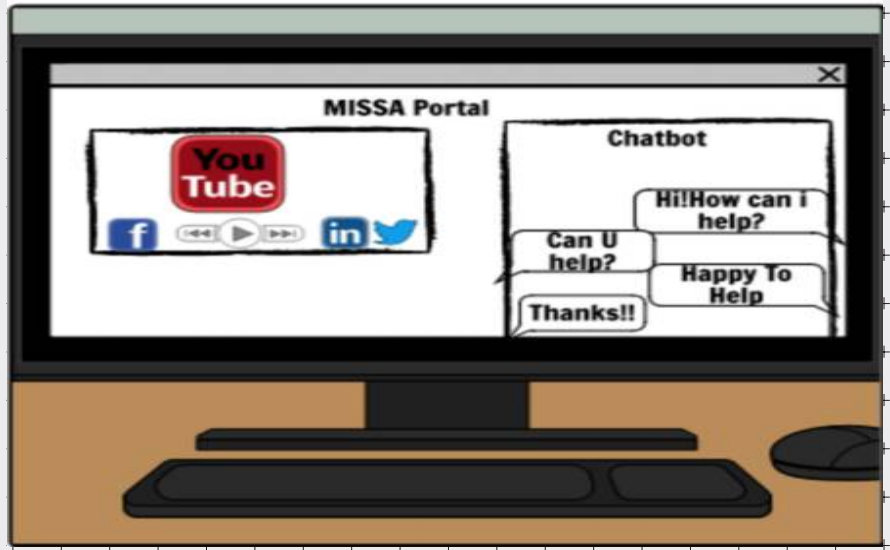
2. Highly qualified industry experts-

Students will get all the required technical knowledge on the latest technologies from the sessions hosted by the industry experts.



### Sketch to Think

Pick one of the favorite ideas from the brainstorm, and flesh out the concept through a quick sketch or two.



Ask other group members for feedback about their favorite part of your sketch as well as aspects where they see room for improvement. What did they say?

## NOTES

They really appreciated both the sketches and the idea of workshops, idea of chatbots and the idea of providing the youtube videos through the portal.

Couple of improvements they suggested were :

They asked for providing the certificates for workshops so that  
then use it in their resume.

They also suggested to add more social networking plugins for example linkedin and facebook.

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. Each ruling unit consists of a solid top line, a dashed middle line, and a solid bottom line, which is a standard format for teaching handwriting to young children. There are ten such three-line units on the page. The margins at the top and bottom are wider than the spaces between the lines.



## 3-2 Refine Ideas

### Do a Reality Check

What is at the core of your idea: what gets you excited about it? What is the most important value for your audience? What is the real need that this is addressing?

Make a list of all the challenges and barriers you are facing with your idea. What are you missing? Who would oppose the idea? What will be most difficult to overcome?

Starting from the list you created in step one of this worksheet page, describing the core values of your idea, what are other ways in which you could address the needs differently?

#### VALUE, NEEDS

The core of our idea is to invite industry experts to deliver a session which be helpful to the students in building their skillset.

The exciting part of our association is that students will be aware of the latest technologies. The most important value for our audience is that we will be providing them with the certifications after completion of the session. The real need that this is

addressing is to plan for the future goals of the students and guide them based on their interests.

#### CHALLENGES, BARRIERS

If radius is more than 10 miles then students require to manage transport by their own. Lack of transparency in management and decision making by project team.

Lack of participation and communication between students and industry experts for the events.

Insufficient skills and training for the team members.

Absence of platform/forum for the exchange of ideas.

We are missing the transportation facilities in case the radius > 10 miles. Their is no platform for exchange of ideas.

Consulting firms who guides students may oppose our idea.

The most difficult thing to overcome can be the budget (financial aid from the school).

#### NEW CONCEPTS

There are other ways in which we could address the needs differently are-

1. Social media-We can get contacts of the industry experts from the social medias like linkedin, facebook etc.

2.You tube- We will upload the video of the sessions conducted by the industry experts on you tube so that it is publicly available.

3.Website- We will create a common portal for the students to register for the events delivered by industry experts.

4. Poster making- We will create a poster to attract the students so as to attend the sessions conducted by our association.



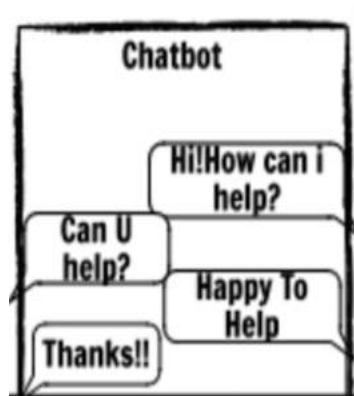
## Describe Your Idea

Create a concept description for the idea that you would like to prototype and repeat for each idea.

### CONCEPT NAME:

User- friendly website with inbuilt Chat bot technology

### SKETCH



### HOW DOES IT WORK?

We will create a website where students can login with their credentials and get all the information about the past events for reference and upcoming events.

They can watch videos of all the past events and see the live recording of the speaker. We have the technology of chat bot built in the website which will help to answer all queries of students in the similar fashion we have conversation with humans.

### WHAT NEEDS OR OPPORTUNITIES DOES THE CONCEPT ADDRESS?

This concept will provide student with knowledge about the latest technologies It will increase their confidence and motivation level. They will get information about how to survive in the IT industry. The chat bot facility will satisfy students by guiding them for all the question and queries.

### ONE-SENTENCE CONCEPT DESCRIPTION:

MISSA is an association to solve all the major problems which are faced in most of the colleges such as lack of industry exposure , practical knowledge and interaction with the outside world

### WHO DOES IT INVOLVE, BOTH IN BUILDING AND IN USING IT?

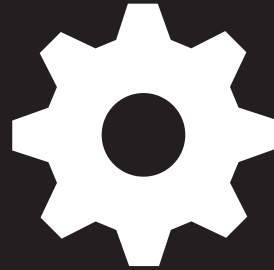
To build the prototype we have to choose a potential speaker. This can be done in several ways. The most quickest and easiest is through the word of mouth. We can ask colleagues or send a department wide email for an individual interested to speak for a particular topic. To use it we have to prepare the students a day or two before and share questions with them which they can ask from the speaker. We have to inform the date and time a few days prior to the event. Make sure that students are able to gain knowledge from the event we can challenge this by asking student to prepare

### WHAT DO YOU HOPE TO LEARN MORE ABOUT THROUGH PROTOTYPING THIS IDEA?

a set of questions to ask the speakers While creating the prototype we came across an idea to provide transportation facility to the students which will help to increase their frequency to attend the event. There are situations where students cannot attend the event due to lack of transportation. We also learned that while doing the industry survey, the quality and appropriateness is classified as one the most important component We have to take a close look at the dynamic of the speaker.

***You have now generated lots of ideas and chosen a few concepts to move forward.***

***In the fourth phase of the design process—Experimentation—you will prototype in order to bring your concepts to life.***



# 4

## EXPERIMENTATION

### WHAT'S IN THIS SECTION

***4-1 Make Prototypes***

***4-2 Get Feedback***





## 4-1 Make Prototypes

### Take Photos

Since your prototype should be out in the world, take photos of it and place them here.

### SOME THINGS TO TRY

#### CREATE SEPARATE SIMPLER PROTOTYPES

"Works like" (how the back end functions), "acts like" (how the "front-end" interaction works), and/or "looks like" (how it looks).

#### TRY "EXPERIENCE PROTOTYPES"

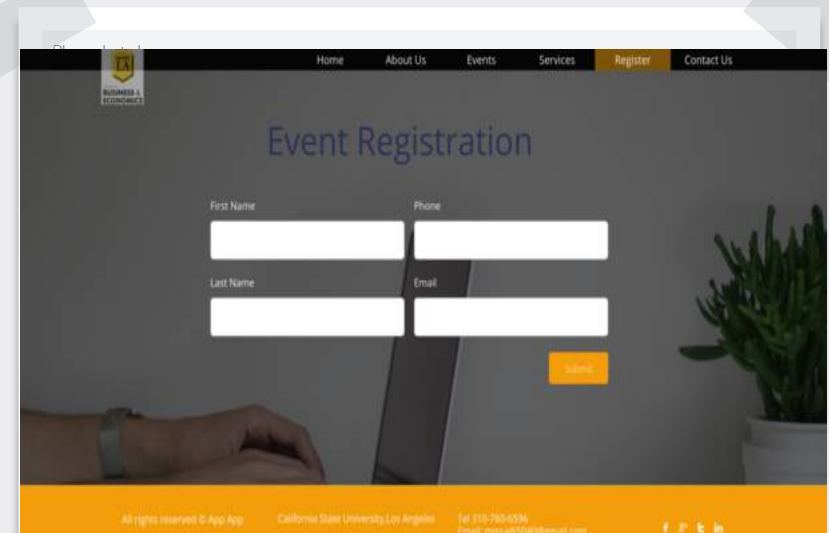
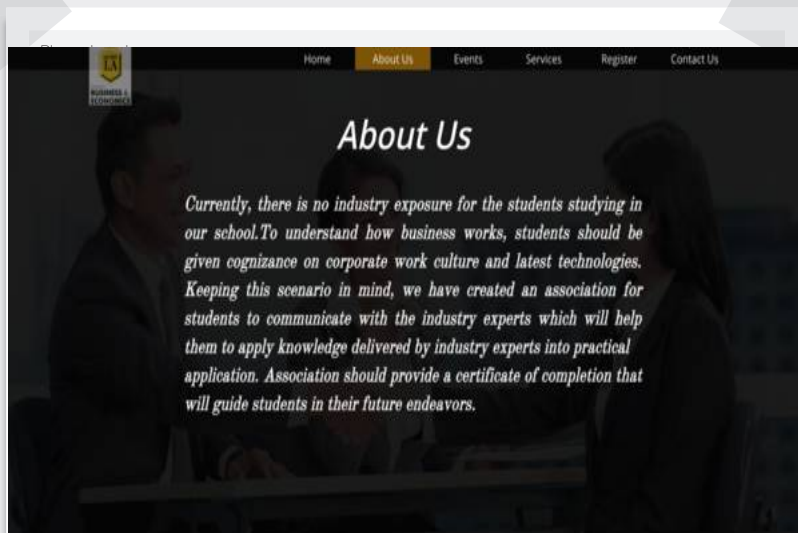
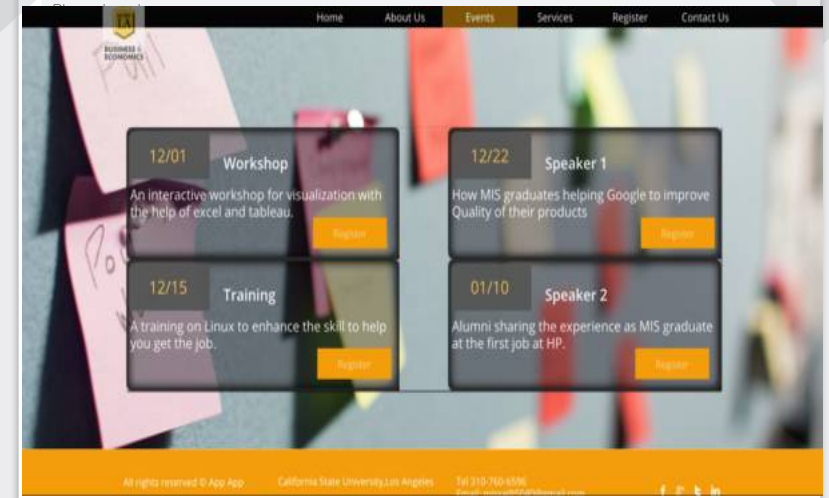
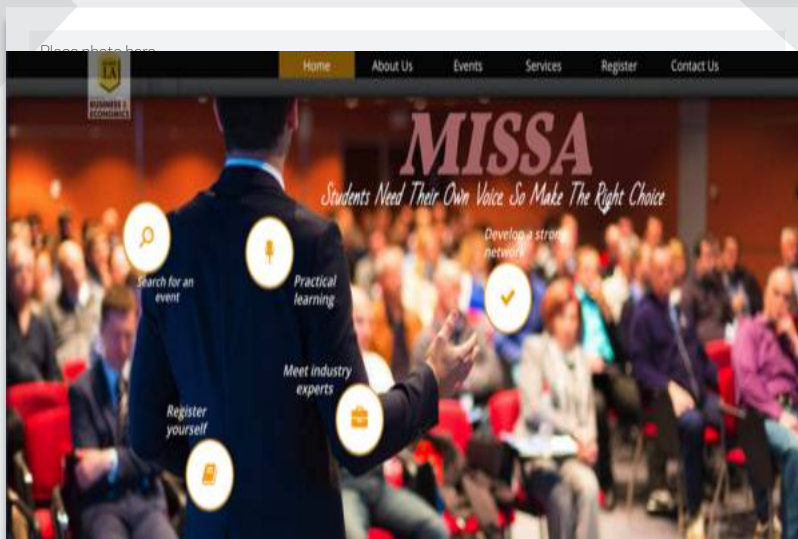
Have people roleplay or bodystorm using props and prompts.

#### SHRINK BIG THINGS DOWN

Use scale models and mockups.

#### GO 2D

Use storyboards or diagrams.







## 4-2 Get Feedback

### Identify Sources for Feedback

How do you need to test your prototype in order to receive the most relevant feedback? Can you let people experience your prototype without further explanation by leaving it in various places? Do you need to walk people through the experience of your prototypes? What will your testing session look like?

#### I WILL TEST BY...

We need to check all the features whether they are working or not. We need to do proper analysis of the portal created by us. We need to keep a track of communication between the industry experts and the students. Yes, people can experience our prototype without further explanation by leaving it in various places as our prototype is user friendly. Our prototype is very easy to understand hence there is no requirement to walk people through the experience of our prototype.

What about your idea do you need to test? What kind of feedback do you need in order to iterate and refine your idea? What is the most important question you want to ask? Are you trying to learn whether people would participate in a new activity you designed? Are you wondering whether people will change behaviors over time because of your concept?

#### LIST FEEDBACK GOALS

We will be testing whether all the services provided for the students are working or not. Transportation for students requires financial guidance from the school. The most important question we want to ask is that whether students are getting the required trainings from the industry experts through our common portal. Yes, we think people would participate in the new activities like quizzes, debates as the sessions are going to be interactive. People will change behaviors over time as our concept will get updated everytime.

### Select Feedback Participants

Who do you want to engage in the feedback process? Who will you learn the most from? Include people you have met during your field research as well as new participants.

#### FEEDBACK PARTICIPANTS

- Students: We will engage students in the feedback process as they are the major users of the system.

- Faculty: We will be collecting all the responses from the faculties regarding the arrangement of the technical event.

- Other association members: People from other associations can guide us for the management of events.

- Coordinators: They are the concerned members of the association who will be connecting the students with industry experts.

- Industry Experts: These are the primary bodies of our association who will guide us to conduct surveys from the students regarding their awareness about the latest technologies.

The students play the critical role in the feedback process where we can learn the improvements required to update the future system.

During the field research, we came across corporate associated people who gave us the overview of how the business process works.



## Build a Question Guide

It is likely that as you have made your idea tangible, you have developed questions about how the prototype should work, what people are interested in, how to best engage participation, etc. List any questions that have been bubbling up about your concept. During your feedback session, you'll want to ask for specific feedback about your idea. What would you like to know more about?

### START SPECIFIC

What are some specific questions you can ask to open the conversation?

1. Does the timing of events suit your schedule?

2. Are there enough transportation facilities available to commute to the events?

3. Which days of the week suits the most for hosting the events.?

4. Is the knowledge provided by industry experts applicable to the curriculum?

### GO BROAD

What are some questions that can help you start to understand this person's hopes, fears and ambitions?

1. Would the knowledge sharing help in the future?

2. Which technologies would you prefer to gain knowledge about through these events.?

3. Would you want the speaker to be accessible after the events?

### INTERVIEWEE NAME

Aryan kuntal



#### TIP

Fill this out of this for each interview.

### PROBE DEEP

What are some ways you might be able to dig deeper in the conversation,, to find even more of the perspective this person has?

1. Would you be able to crack the interview based on the knowledge received from such events?

2. If the speaker is accessible to you after the events what particular topics you want to discuss with him?



## Facilitate Feedback Conversations: Capture Prompts

Use these prompts to help people give you constructive feedback, and to help you consider what parts of the experiment you should keep or change.

### KEEP

-Student registration for the events such as workshops , training conducted by our association.

-All the detailed description about industry experts with their office timings.

### INCREASE

We will try to maximize the support for the transportation facilities for the students.

We will try to increase the frequency of the number of sessions conducted by our association.

### DECREASE/STOP

We will try to lessen the number of students per session.

We will try to keep the explanations concise provided by the industry experts and will be highlighting with the real time examples.

### KEEP

-We will continue with the service of Chatbots for the students to provide them with all of their queries and suggestions.

-We will carry further with the practical training and workshops for the students.

### INCREASE

Industry experts will try to impart meaningful learning to the students and make the sessions more interactive.

With the help of the fellow students and professionals , we will develop a strong network between the students and industry experts.

### DECREASE/STOP

Students can easily approach the industry experts within a short period of time.

With the support of chatbots, students can get answers to their questions within a short span of time.



## Integrate Feedback

What was the original intent of your concept? Review the feedback from your testing sessions. Based on the feedback you have received, do your earlier learnings and ideas from your research and ideation phase hold true?

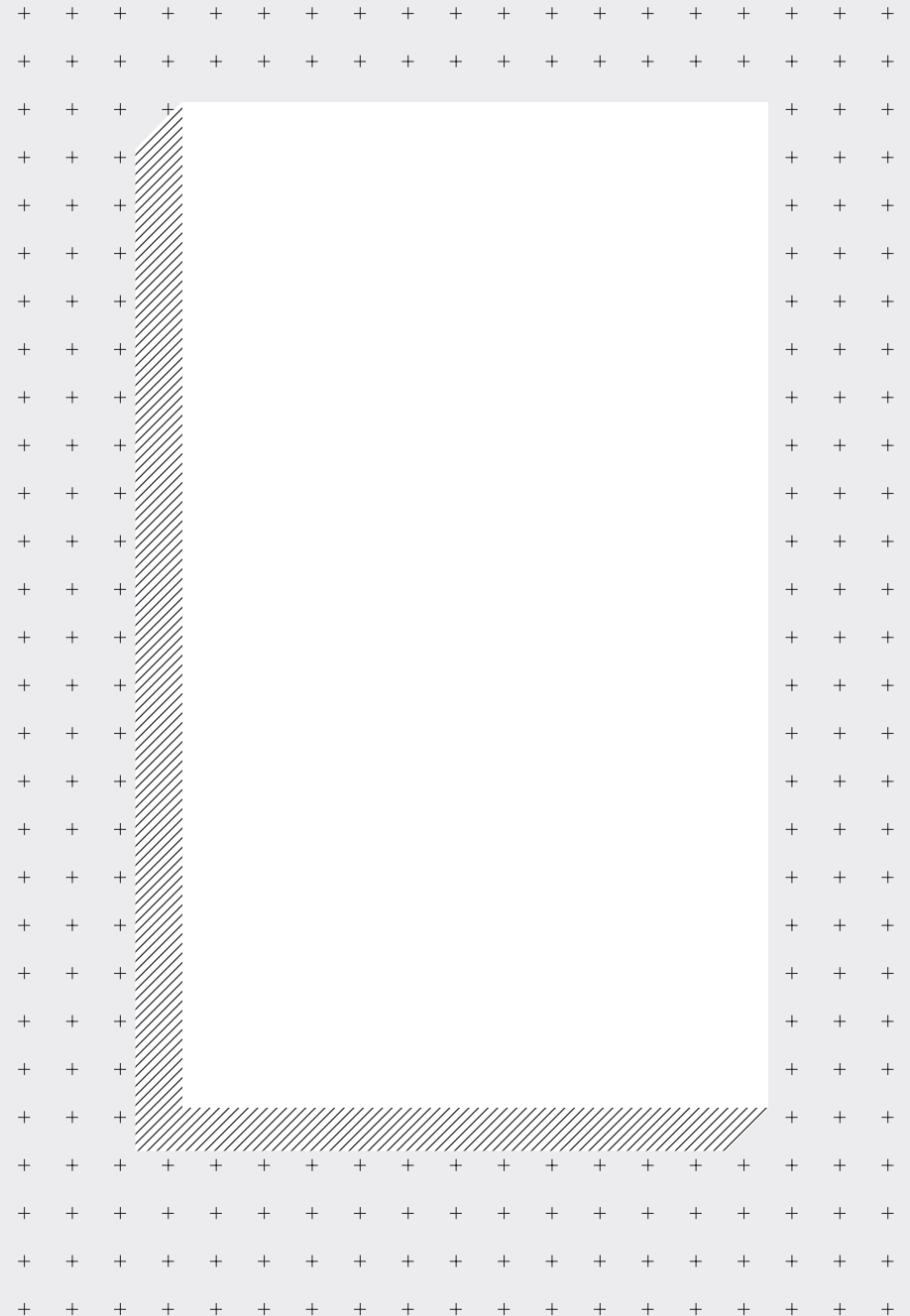
### REFLECT

The original intent of our prototype was to get early feedback from the future members of the association. Yes some of the ideas from the ideation and research phase still hold true. Future members were very interested getting the certificate and they show real intent of attending the workshop as they expressed their interest in organizing workshops in non peak hours like after the college or during the lunch so that they can attend.

According to your feedback, what do you think is most important to making your idea a success? How might you improve your prototype? How can you emphasize what was well received about your prototype?

### FEATURES TO ITERATE

The success factor of the prototype was the support for interactive sessions. We can improve more on supporting live question answers among the audience and the speaker. We can have better interface through website and we can support online white-boarding through our website.





## Identify What's Needed

List the materials you will need to build your refined concept. Are these supplies available at your school? Will you need to purchase any new assets?

### AVAILABLE AT SCHOOL

Student Association's hall

Pamphlets

Stationary items

Student's database

Community Newspaper

PC/Laptop

Projector

Snacks

Chairs

### NEED TO BUY

Book material

Video/Audio dvds

Stage decoration materials

Mic and speaker

Podium

How much do I need to make this concept a reality?

### COST

Depending on the financial aid provided by the department head of the school.

How can I get funding or materials support?

### SOURCES

Schools

Corporate organisations

Alumni

Who can help you realize your idea? What capabilities are you looking for? Who is invested in supporting the concept? Do you need to find someone to champion the idea?

### PEOPLE

Students, other association members,

Corporate offices, Schools are the ones who will help us realize our idea.

Team management, communication skills, peer evaluation, growth are the

capabilities we are looking for. All the association member including faculty and staff, Co-ordinators and students

are invested in supporting the concept

There is no requirement to champion our idea.

How long will it take to bring this concept to life in a more refined way?

Do you need time for preparation? Does anyone need to be trained?

Do you want to use an existing meeting time differently?

It will take near about 3 months to bring this idea into reality. We need around a week to develop our idea. Yes, all the association members need to be trained. We will

TIME

setup meeting once in 2 weeks to track our project progress.

***You now have a prototype out in the world. Congratulations!***

***Now it's time for the Evolution step of the design process, where you'll collect learnings and consider how you can scale and engage others to further your design solution.***



# 5

## EVOLUTION

### WHAT'S IN THIS SECTION

***5-1 Track Learnings***

***5-2 Engage Others***



## 5-1 *Track Learnings*

### Define Success

Review the goals you set out in the getting started section of this workbook. Reflect on how your vision maps to where you are today. How has your concept been used? Is the prototype being used by the people you intended it for? What do they appreciate about your concept?

#### CONCEPT USE

##### Goals-

Coordinators of the student association will be responsible for the student's registration and queries and every student will be provided with an entry pass for attending the sessions

Virtual assistance will be provided to students through chatbots for their regular communication.

Every session delivered by industry experts will be uploaded on the YouTube which will be public where students and guest users can subscribe to our association's channel.

Highly qualified and experienced industry experts will be guiding the students.

Currently, we have designed the framework for the students registration portal and will be working on further development of it. Our concept is being used by the students for registration of the event where they are able to interact with the industry experts. Yes, our prototype is intended to be used by the students.

The most appreciable part of our concept is the use of chatbots as well as certificates provided after the end of the events that will help the students in their future goal.

What does success mean to you? What do you wish to see happen with this project? Are you hoping that a large number of colleagues attend an event? What would you tell the school's leadership in order to receive more funding? What would you like to hear a student say about your idea?

#### IMPACT I AM LOOKING FOR...

According to us, success means accomplishing the goals of building an association for the students where industry experts will be throwing knowledge on latest technologies. We wish that our project should be used by every student in the school so that they can be benefitted in the near future. Yes, we are hoping a huge gathering of students as well as their colleagues as we are going to advertise our event. We will try to convince the leadership of our school by claiming that our association will help the students develop their skill set with latest technological trends which will in turn help our school to get high count of students in the placement cell. We wish that students praise our association for the guidance which is provided to him./her in terms of not only the technical knowledge but also the resume building.

How will you track and measure the success of your design solution? Will you ask people about the concept? Are you waiting for someone to approach you?

#### METHOD FOR TRACKING

Number of students registered vs Expected registrations

Number of active users vs number of number of registered users.

Minimal complaints regarding registrations for organized events.

When we can easily solve the issues of students on chatbots.

Satisfaction surveys reflecting positive responses.

Yes, we will ask the people about our concept and get their required feedback.

We are not waiting for anyone to approach us as we have already done with interviews and surveys.



## Document Progress

Document progress of your concept. What different behaviors have you noticed since implementing your concept? Have the relationships between people changed? What comments have you received from your students or peers?

### NOTES

The concept of creating the student registration portal to register for the events is becoming prevalent across the campus. Non- technical

and under-graduate students are also showing interest in these events.

In the initial stage of the concept there was 4% participation of the student which has now increased to 15% participation. People are gaining knowledge about different tools, real- time application and how things work in the industry.

Some of the comments received by the students are:

1)They want the session to be an interactive online session. By this it means that those who are seeing the live video online should be allowed to ask the questions online.

2)There are a lot of students who missed the event due to lack of transportation.

3)Some of the industry speakers were tied to the topics from industry

Students wanted them to relate it to the topics which they are doing in the class.

\They will help them correlate between the industry and classroom topic.

What do you need to illustrate the "before/after" impact overview of the design solution?  
Do you need to gather images? Quotes?

### ASSETS I NEED...

We will need to evaluate the satisfaction index using the survey to understand before and after impact.

We can also analyze the traffic on our portal using google analytics to see how many unique users/students are visiting our portal to evaluate the success.

We can also add forum on our portal or create a Linkedin group to see how many students are actively discussing and sharing their experience.





## 5-2 Engage Others

### Plan Next Steps

What are all the actions that need to be taken to build your concept? Capture any open questions. Who will be responsible for each task? Who will be responsible for finding answers to any open questions?

#### ACTIONS, QUESTIONS

Need to contact the industry experts

Get connected with the students

Build an association

Create common portal for student's registration for the events.

Are the events useful for your career goals?

Did the event meet your expectations?

Were the industry experts updated by the latest technologies?

Coordinators and faculty will be responsible for each task

Coordinators will be responsible for finding answers to the open questions

#### PERSON RESPONSIBLE FOR FOLLOW-UP

Coordinators are responsible for the follow - up.

Responsibilities:

Develop contacts with the industry experts.

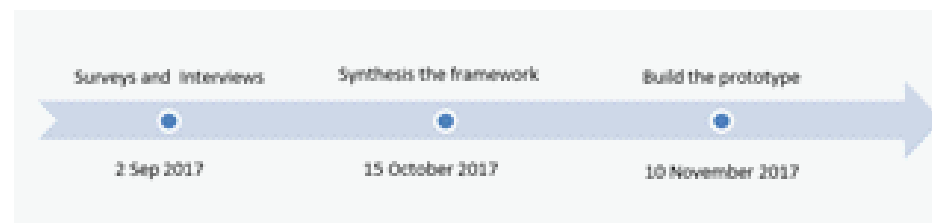
Coordinate communication between industry experts and students.

Organise events for students

Handle student's common registration portal.

Create a timeline which includes your deadline for evolving this concept along with any other major meetings or dates.

#### TIMELINE





### Pitch Your Concept (optional)

Who are you pitching to? Create a provocative statement for your idea that will get your audience excited about the opportunities you see. Frame it as "What if...?"

#### TIP

Use this method when you are trying to gain support from others in order to bring your idea to life.



#### WHAT IF...

What if we can provide students with the augmented learning experience where they are not learning only from the books and classes, but also from the experiences of the industry experts. What if students could learn what are the day to day challenges they may have to face in the real world before they start job. MISSA is designed to prepare students to be able to face the challenges of real world successfully. They can hit the ground running with the learnings from workshops and trainings organized by MISSA.

Tell a brief and engaging story, focusing on the most important aspects of your concept. What story will you tell? What inspired your idea and how does it respond to the needs you uncovered? Why is this idea valuable to the various people involved?

#### STORY, INSPIRATION, VALUE

Many times even best students of the class struggles in the real world situations because classroom only tells you about how to solve a problem, but there are other factors involved in real jobs. For instance, you are only working on a specific part of a problems and entirely different group of people on other parts of problems and some other team is consolidating all the work. There are timelines involved.

This has inspired us to come up with an idea to provide a students a little extra bit of knowledge by sharing real experiences of industry experts to help them to be successful in their career.

What are you asking for from your audience? Clarify your list of needs.

#### NEEDS

We have divided the audience in three categories sponsors, students and speakers.

From sponsors we ask for their financial help and time for event planning and event organization.

For students we ask them to join our events with enthusiasm and make them successful. Also provide feedback to make our association much more effective in our different offerings like online portal and at event workshops.

For speakers we ask for their time and willingness to give back to the community since students are in the same place where they were at same point.



## Build Partnerships (optional)

Which organizations or individuals have capabilities you are missing in order to realize your idea? What is your relationship with them? How can you reach out to them?

### TIP

Use this method when you need the resources or capabilities from others to realize your idea.

### WHAT IF...

International Toastmasters club is an organisation for building communication and leadership development. Their goal is to make up global network of meeting locations. Such educational clubs or organisations have capabilities such as – leadership abilities, communication skills, developing global networking etc. Toastmasters International Club emphasizes on giving speeches, leading teams and guiding others to achieve their goals. In the similar way, our association has industry experts who guides students with the latest technological updates and help achieve their career goals.

### NOTES

We can easily reach out to one of the association members by asking him/her for more detailed description on the working of the association as well as the activities performed in the club.

What are you asking from them? Consider adapting your pitch to speak directly to this audience. Why would they be interested in helping? How do both parties hope to benefit from a partnership?

### BENEFITS

Our association would like to do partnership with schools as they can help us with financial aid. Schools can get interested in our association as our association mainly focusses on student's welfare. Both parties will get benefitted from partnership.

a. Our association will be contacting highly qualified and experienced working professionals who will be imparting their knowledge on latest technologies. Schools can ultimately get some referrals from our association.

b. Our team will help the students develop their skill set with latest technological trends which will inturn help our school to get high count of students in the placement cell.

c. Students and professionals who all wish to attend the events organised by our association will get connected with each other which will lead to a global network. This will be very beneficial for the schools to develop a strong global network.

### NOTES

Our team has some goals set for the student's career development which may include:

a. Delivering knowlegde on latest technological trends by industry experts.

b. Developing a strong global network.

c. Providing students with certificates and guiding them with resume building.



## Share your Story

Outline the presentation you'd like to give to share your story. Consider these prompts...

### TIP

Use this method when you want to share your design experience and solution with a broader audience.

What was the initial dream/gripe that kicked off this challenge?

The initial dream was to invite companies to provide knowledge to the students about the new emerging technologies and to enhance practical application of the skills along with their course work. We took this challenge because students were not able to apply the knowledge in the real world as course work was not designed to help them solve the real world issues.

Who was part of the team or contributed to the project?

Vision R US team developed and integrated the idea to create an association which would enhance the practical application of emerging technologies among students which would better prepare them for the industry workforce. Apart from the team, a random sample of students was selected for interview and as target audience.

What partners did you integrate?

The team approached few industry speakers and IT companies to contribute to the vision. Also, the financial aid department supported the project by providing initial funding.

What partners did you integrate?

What needs did you learn about?

The student wanted to learn how to apply the knowledge in the real world. Also, a lot of start up companies wanted the students to take up internship in their companies because they were not able to afford salaried employees. So we did a marriage between the two.

What needs did you learn about?

What was the most surprising thing you learned while looking for inspiration?

When we shared the ideas with students about the association they were very excited and they provided feedback that it would be a good step in their learning growth and enhance their skill set. The surprising thing was when the students started applying the practical knowledge in their regular course work and started securing internships and jobs. Also, students started making connection with the industry speakers for future references. The feedback provided by them was very inspiring.



## Remember your process

Use photos to illustrate where possible.

What was the most absurd brainstorm idea?

Students coming from distance more than 10 miles would not be able to commute and participate in our association's event.  
Transportation being the major constraint of our association became the absurd brainstorm idea as we could not get appropriate solution to this problem.

Share a few of your initial concepts or prototypes.

What kind of feedback did you receive on these concepts?

Concept

Currently, there is no industry exposure for the students studying in our school. To understand how business works, students should be given cognizance on corporate work culture and latest technologies. Hence, we will be building an association for students which allows their communication with the industry experts where industry experts will be delivering knowledge on latest technological trends. Interaction will be done with the industry experts through social media like LinkedIn, Facebook, Twitter, etc. for connecting the students.

Feedback

As a graduate student, I want to join a student association which will help me positively in my educational experience and career growth. An association which help me get networking opportunities, to be able to apply my skills which I have learned in the class. I really feel like that I am losing competitive edge when I see other students from other schools that how they are engaging with diverse groups of people. Hence, an association that provides meaningful learning, develop my skillset and allow me to connect globally will be beneficial for me.

Concept

Creation of common portal for students registration for sessions delivered by the industry experts on latest trends organised by our association. This portal will allow students to register for the event and also have autogenerated emails including confirmation, cancellations, discounts/referral codes, etc.

Feedback

As a student I require a userfriendly portal where I am able to sign up for the events organised by the association. The interface of the portal should be simple and easy to understand for any student. Features related to portal like confirmation emails should be prompt enough.

Concept

Will be linking our portal with YouTube so that student who has missed any past event can see the recording for that event. Usage of chatbots, to solve the queries of student for which solution is not provided on portal. Events organized by association will provide certificates for the students that will help in achieving their future goals.

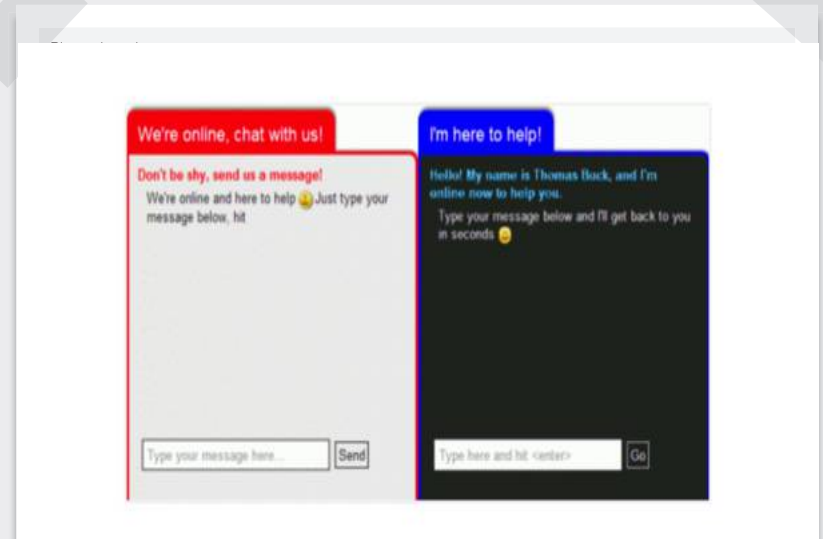
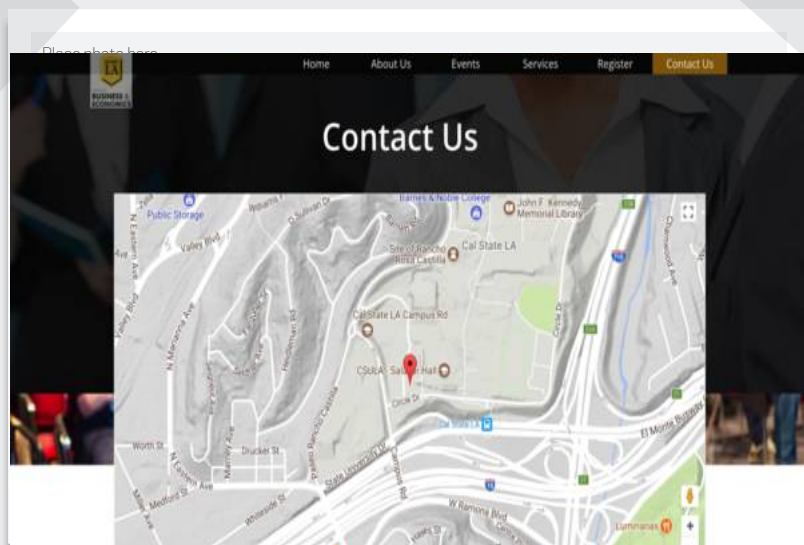
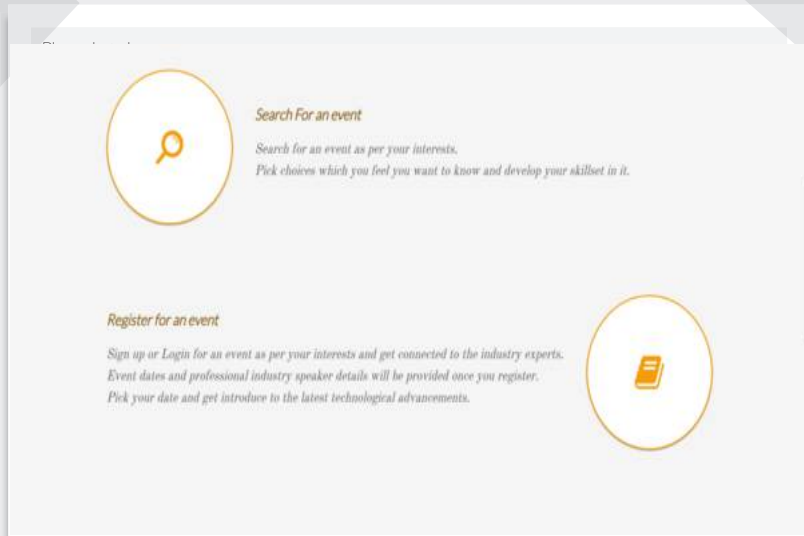
Feedback

In case of any event been missed, students should be able to see the past recordings for which those recordings need to be maintained somewhere. Chatbots should solve all the general queries of the students. Certificates provided by the association for every event should count on the resume in their future career.



## Show us where you've gotten

Use photos to illustrate where possible. Share your concept.



### HOW HAS YOUR PROTOTYPE BEEN SUCCESSFUL?

People have shown good interest in major feature of our website for example features like ability to sign up for a particular event and getting reminders for the same was very well received. Also people really appreciated the ability to play past events for their references.

### CAPTURE QUOTES YOU'VE HEARD RELATED TO THE DESIGN AND/OR IMPACT YOU'VE SEEN AROUND THE STUDENTS/SCHOOL/CLASSROOM.

People wanted to have similar association for their department.



## Build a Community

Advancing your understanding of Design Thinking is best done through repeatedly undergoing the process with new design challenges. Having a network of people you can bounce ideas off is essential to moving your thinking forward. Who will you invite to your design network?

### DESIGN MEETING TIMES

How often will you meet? How long will your meetings last? Where will you meet? What dynamic do you want to establish? What will you discuss?

Who you will meet?

We shall be inviting the corporate professionals to our design network so that they can provide their valuable cognizance on the latest technological advancements. Every expert who will be the part of our association will be guiding the students to plan their future career goals. We might collaborate with some of the association members who will hand over information on how to build a foundation, perform planning, monitoring and maintenance for our association.

When?

We will setting up a meeting to discuss with the industry experts regarding the latest technologies they will be teaching once a week during their office hours. Prior appointments will be taken for the other association member's meetups.

How often?

We shall catch up with the other association members and industry experts once a week.

**Now that you've completed one challenge, it's time to start the process over again. Define a new challenge and work your way through the process. Refer to the Design Thinking for Educators Toolkit to bring more depth to your work!**

What design challenge will you tackle next?

### CHALLENGE QUESTION

Students coming from distance more than 10 miles would not be able to commute and participate in our association's event which is the new challenge for our association.

### WHAT KIND OF CHALLENGE IS THIS? (CIRCLE ONE)



CURRICULUM



SPACES



PROCESSES  
AND TOOLS



SYSTEMS



#### ABOUT THE TOOLKIT:

At IDEO, we've been using similar processes, methods and tools for years in tackling some dauntingly complex challenges. More often than not, we've experienced how Design Thinking helps to get to the next step. That's why we are excited to see how it can impact the world of education. Teachers at Riverdale Country School are starting to use design process to address challenges in their classrooms and schools, and together we've created this toolkit in order to share these processes more broadly.

## Riverdale IDEO

Riverdale Country School is a Pre-K through Grade 12 independent school in New York City.

[www.riverdale.edu](http://www.riverdale.edu)

IDEO (pronounced "eye-dee-oh") is an award-winning global design firm that takes a human-centered approach to helping organizations in the public and private sectors innovate and grow.

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# Designer's Workbook

**Design  
Thinking  
for  
Educators**