Yes, I'm.

是的，我是。

Makes sense?

意义？

So this is an introductory lesson. My goal for today is to.

所以这是一堂入门课。我今天的目标是。

My goal for today is to just warm up and you have to get familiar with some relevant definitions that you're going to reiterate throughout the semester. You're going to explore, explore the module scope, what is your computer interaction? What are all the related areas? And I'm going to introduce you to the concept of design thinking and also the design process.

我今天的目标是热身，你必须熟悉一些相关的定义，你将在整个学期中重申这些定义。你要探索，探索模块范围，你的计算机交互是什么？所有相关领域是什么？我将向你们介绍设计思维的概念以及设计过程。

I'll jump straight to the first.

我将直接跳到第一个。

I'm going to jump straight to an activity of design thinking. Everybody, do you have pen and paper? Pen or prayers and paper?

我将直接跳到设计思维活动。各位，你们有纸笔吗？笔还是祈祷和纸？

If you don't have a pen and paper, you need something to write down. It could be any app on your laptop or on your phone. If you don't, if you don't have anything to draw, you can use like you know, even your phones, you're going to write some descriptions. OK, you need to take

this.

如果你没有笔和纸，你需要一些东西写下来。它可以是笔记本电脑或手机上的任何应用程序。如果你不画，如果你没有任何东西可以画，你可以像你知道的那样使用，甚至你的手机，你要写一些描述。好的，你需要接受这个。

So those who are attending from home, please grab pen and paper and I'll ask you to take pictures and to share the results of your activity within using the chat or by e-mail later. OK for you as well. I would love if after this activity you can take pictures and send me what you have done.

因此，那些在家参加的人，请拿起笔和纸，我会请您拍照，并在以后使用聊天或电子邮件中分享您的活动结果。对你来说也好。如果在这次活动之后，您可以拍照并将您所做的事情发送给我，我将非常高兴。

OK, so the first thing I'm going to.

好的，所以我要做的第一件事。

What I'd like you to ask you to do is to try to draw a light switch, something that the user or a person, a human being, would use to turn the lights on and off.

我希望你做的是尝试画一个电灯开关，用户或一个人，一个人，会用它来打开和关闭灯。

Thank you very much. Some people might be more comfortable with like making your drawing so light switch. Anything that person would use to turn lights on and off.

谢谢。有些人可能更愿意让你的画如此轻巧地切换。这个人用来开灯和关灯的任何东西。

So if you if you're not comfortable like making problems, don't worry.

因此，如果您不喜欢制造问题，请不要担心。

Imagine again. Imagine the first things that you're familiar with are things that can be completely hypotactical and not realistic. It's fine too.

再想象一下。想象一下，你所熟悉的第一件事可能是完全虚伪和不现实的事情。也没关系。

If drawing on your phone or tablets, take a screenshot or.

如果在手机或平板电脑上绘图，请截取屏幕截图或。

OK, how many of you have drawn a switch that has a button on it? Your switch?

好吧，你们中有多少人画了一个带有按钮的开关？你的开关？

But do the user need their hands to interact with your speech?

但是用户需要他们的手来与您的语音交互吗？

Have you thought about how it works or how to activate your speech?

你有没有想过它是如何工作的，或者如何激活你的演讲？

What the user needs to know before using it? Does it need any instructions? Do your switch has like notes like on and off?

用户在使用前需要了解什么？它需要任何说明吗？您的开关有像开和关这样的音符吗？

OK.

还行。

How to use your nose if you're if the switch is working.

如果开关正常工作，如何使用鼻子。

There's an indicator in the switch as well.

开关中也有一个指示灯。

OK, where does it stand?

好的，它在哪里？

On the wall, raise your hands if you're switching on the.

在墙上，如果您要打开，请举手。

So we should probably be looking something like this.

所以我们可能应该看起来像这样。

So it probably looks something indefinitely. There are some cultural differences in cultural context here, like for me it would be something that would make it look like this. Does everybody? Has anyone has seen something like this before?

所以它可能看起来是无限期的。这里的文化背景存在一些文化差异，就像对我来说，这将使它看起来像这样。大家都这样吗？以前有人见过这样的事情吗？

I've seen this one, so this is one of the most popular awareness problem, and there's something interesting about this one, usually the yellow part.

我看过这个，所以这是最流行的意识问题之一，这个有一些有趣的东西，通常是黄色的部分。

Write themselves when it's dark.

天黑时写下自己。

Do you do your switch?

你做你的开关吗？

So starting to think about the context right and I've gathered a few examples, so maybe some of your switch remember like remind you.

所以开始考虑上下文是正确的，我收集了一些例子，所以也许你的一些开关记得提醒你。

Maybe one of the things are the other day around so we have some usual ones. So this one I don't know if it's on and off. I don't know if like the light if the.

也许其中一件事是前几天的，所以我们有一些常见的。所以这个我不知道它是打开还是关闭。我不知道是否喜欢光。

I can see the lights but if the light moves are not working or if there's an electrical fault I be. I will be using the switch and I don't know if it's working. So some switches are on and off or zero and one and there we have smart switches. So something that we can control with an app or with the sensor we can have like a timer. We can have a team do your switches. Any switches have some advanced functionalities like board and just on and off.

我可以看到灯，但如果灯移动不工作，或者有电气故障，我就能看到。我将使用开关，我不知道它是否正常工作。所以有些开关是打开和关闭的，或者是零和一，我们有智能开关。因此，我们可以通过应用程序或传感器来控制一些东西，例如计时器。我们可以让一个团队来做你的转换。任何开关都具有一些高级功能，例如板和开关。

And start gracing something.

并开始为某些东西增光添彩。

OK. And then you have smart sensors. The user just passed in front of

it or enters the room and then the switch, the lights will be on and off. And we also have other smart sensors like you don't touch, you can have like it's contactless, you wave your hand, maybe the lights will be on and off. But what's the interesting thing about this example is like even if you have to wave your hand in front of the switch, you still have to inform the user, like don't touch, just wait because the users will be familiar.

还行。然后你有智能传感器。用户刚从它前面经过或进入房间，然后开关，灯就会亮起和熄灭。我们还有其他智能传感器，比如你不触摸，你可以像非接触式一样，你挥挥手，也许灯会打开和关闭。但是这个例子的有趣之处在于，即使你必须在开关前挥手，你仍然必须通知用户，比如不要触摸，只是等待，因为用户会很熟悉。

With this kind of system, so there's a button.

有了这种系统，就有一个按钮。

If you've changed countries a few times, or at least one time, maybe the light switch for the roommates outside the room. Sometimes the light switches inside the room.

如果你换了几次国家，或者至少换了一次，也许是房间外室友的电灯开关。有时房间内的灯光会切换。

So when you have this like habit of doing things the same way, and then you change the context or change, it's kind of disruptive. You have to learn how to use the system again.

因此，当你养成以同样的方式做事的习惯，然后你改变环境或改变时，这有点破坏性。您必须学习如何再次使用该系统。

So if we can repeat this activity with other objects that we can use interactions. So in the previous years I was talking about door knobs but I think the light switches.

因此，如果我们可以用其他对象重复这个活动，我们就可以使用交互。所以在前几年，我说的是门把手，但我认为是电灯开关。

I don't have examples of other students to show it, but so This is why I would love to see your drawings today. And when we are creating something, how much do you think your own drawing skills for limiting your ideas or your ability to express how we'd like this switch here? How many of you are very happy with the drawings that you've done? Are the drawings? Do you like your drawings very much? OK?

我没有其他学生的例子来展示它，但这就是为什么我今天很想看到你的画。当我们在创作一些东西时，你认为你自己的绘画技巧在多大程度上限制了你的想法，或者你表达我们想要在这里如何转换的能力？你们中有多少人对你所做的图画感到非常满意？是图纸吗？你很喜欢你的画吗？还行？

How many of you think it doesn't really look like the objects you had in mind?

你们中有多少人认为它看起来并不像你心目中的对象？

So sometimes when you're sketching things, when you're taking the ideas from your head, our own skills, our own ability to express it might be like limiting your own creativity. And you have to don't like, don't worry about that, OK? Throughout this model, the most important thing is for you to get comfortable with sharing your ideas. So if you had an idea inside, put this in a note in the paper. If you don't like drawing, don't think you're a good drawer. You can really write down the description like it's rectangular. It stands on the wall at the specific height that's the color.

所以有时候，当你在画草图时，当你从脑海中获取想法时，我们自己的技能，我们自己的表达能力可能会限制你自己的创造力。而且你必须不喜欢，不要担心，好吗？在整个模型中，最重要的是让您习惯于分享您的想法。所以，如果你内心有一个想法，把它写在纸上的笔记里。如果

你不喜欢画画，不要认为你是一个好的画家。你真的可以把描述写成矩形的。它以特定的高度矗立在墙上，即颜色。

And that's how the user should interact with. You can use.

这就是用户应该与之交互的方式。您可以使用。

Some people have great drawing skills and they got when you have access to different tools and materials. Imagine if you had a 3D printer. Here we might be creating different versions of different prototypes. So sometimes if you also depend on the material. So I had if I get back to the previous slide, so I can use different materials, I can use different sensors and I can represent like the object for interaction.

有些人有很好的绘画技巧，当你可以使用不同的工具和材料时，他们就会得到。想象一下，如果你有一台3D打印机。在这里，我们可能会创建不同原型的不同版本。所以有时如果你也依赖材料。因此，如果我回到上一张幻灯片，那么我可以使用不同的材料，我可以使用不同的传感器，我可以像物体一样表示进行交互。

And find again and the tools and techniques that I can use.

并再次找到我可以使用的工具和技术。

Now, getting back to your light switch, let's try to put this in a different context. OK, what would make for the user just a great experience when they're turning the lights on and off? So I started talking about sensors and like, even the position, like if it's indoor, inside the room, outside the room. And how many of your switches you're thinking like were used indoors.

现在，回到你的电灯开关，让我们试着把它放在一个不同的上下文中。好的，当用户打开和关闭灯时，什么会让用户获得出色的体验？于是我开始谈论传感器，甚至位置，比如在室内，在房间内，在房间外。以及您认为有多少开关是在室内使用的。

OK, how would you need to be adapted if it was to be used like outdoors?

好吧，如果要像户外一样使用，您需要如何适应？

Would you need to be adapted if it was for a user? Like the hands are not available? If I'm coming in and I have like I'm carrying lots of bags and a baby and a hat and something and I can't use my fingers, how would you adapt to this? Can you try to think about alternatives for the design?

如果是为用户改编，是否需要进行调整？喜欢手不可用？如果我进来了，我背着很多袋子，一个婴儿，一顶帽子和其他东西，我不能用手指，你会如何适应？你能试着想想设计的替代方案吗？

Or even the context of light. It is like 1 lamp or like a full room or again it's outdoor. Is there an element of safety, of helping the user to feel safe, helping the user to feel secure?

甚至是光的背景。它就像一盏灯，或者像一个完整的房间，或者它又是室外的。有没有安全因素，帮助用户感到安全，帮助用户感到安全？

So you start thinking about the context and how like the user needs might change.

因此，您开始考虑上下文以及用户需求可能会如何变化。

There are other examples as well. So thinking about contact, this is kind of St. lighting and it will light themselves as we are, as the users are. People will be pedestrians.

还有其他例子。所以考虑到接触，这是一种圣照明，它会像我们一样照亮自己，就像用户一样。人将成为行人。

So there is many other discussions if you want to turn the lights in and off, how much lightning has to be, how much you like to do actually.

因此，如果你想打开和关闭灯，还有很多其他的讨论，有多少闪电，你实际上喜欢做多少。

So one thing that's important to note, like how to apply an imperative approach. So far we're taking the ideas from your head and your paper with how to make this a very good design. How to make something that the user would like to interact with.

因此，有一件事需要注意，比如如何应用命令式方法。到目前为止，我们正在从你的头脑和你的论文中汲取想法，如何使它成为一个非常好的设计。如何制作用户想要与之交互的东西。

You need to get back to the theory and.

你需要回到理论上来。

So what is Human Computer Interaction? The light switch makes things adjust an electrical component OK in Human Computer Interaction.

那么什么是人机交互呢？电灯开关使人机交互中的电气元件调整正常。

The initial work, and I'm going to talk about the history of it today, it will be how people interact with computers. But now we know computers are like everywhere. A coffee machine is also the future. You have the laptops, you have, you're carrying our phones, you have smart watches. So Human Computer Interaction scope has broadened. It's not just.

最初的工作，我今天要谈谈它的历史，它将是人们如何与计算机互动。但现在我们知道计算机无处不在。咖啡机也是未来。你有笔记本电脑，你有，你带着我们的手机，你有智能手表。因此，人机交互的范围已经扩大。这不仅仅是。

OK, we have interaction with technologies everywhere. It changed our behavior because we can define the way we travel, the way we leave,

how cities are designed, how public transport are designed, how cars are designed. Okay. So I'm going to try to cover all this state, but in this module, the things that we're not going to build or develop anything, so we don't have those barriers. The same for your drawing skills. I'm not judging your drawing skills, I'm judging our ability to.

好的，我们到处都有与技术的互动。它改变了我们的行为，因为我们可以定义我们的旅行方式，我们离开的方式，城市的设计方式，公共交通的设计方式，汽车的设计方式。好。因此，我将尝试涵盖所有这些状态，但在本模块中，我们不会构建或开发任何东西，因此我们没有这些障碍。你的绘画技巧也是如此。我不是在评判你的绘画技巧，我是在评判我们的能力。

Emphasize and to understand and try to put yourself into the user's shoes and try to think from the user's perspective.

强调和理解，并尝试设身处地为用户着想，并尝试从用户的角度思考。

And we're going to, I'm going to, we're going to have a lot of activities for you to practice the design, OK, what's the design process, how to get something that it's engaging that people would understand how to use that to bring solutions for problems.

我们要，我要，我们要有很多活动让你练习设计，好的，设计过程是什么，如何得到一些吸引人的东西，人们会理解如何使用它来解决问题。

So there is an element of design, but sometimes you will be invited to prove something that's already there. OK, it's very rare that the designer will be invited to do the whole process, like from the original sketches up to the final version that's going to the market or if it happens.

所以有一个设计元素，但有时你会被邀请去证明已经存在的东西。好吧，设计师很少会被邀请做整个过程，比如从最初的草图到即将上市的最终版本，或者如果它发生的话。

We're not guaranteed that's going to happen some success. So how to improve the design process? How to make it better?

我们不能保证这会取得一些成功。那么如何改进设计流程呢？如何让它变得更好？

So we have the user, we have the design, you have the design, the interaction component and trying to understand all the impact of this computer interaction nowadays.

所以我们有用户，我们有设计，你有设计，交互组件，并试图了解当今这种计算机交互的所有影响。

There is implications of ethics. There is implication of a lot of responsibility from the side of the designers and also from the side of the users. I'm going to also talk about ethics and privacy and data collection.

伦理学有其含义。从设计师和用户的角度来看，都意味着很多责任。我还将讨论道德、隐私和数据收集。

So some important definitions that I'm going to introduce today are going to revisit this several times during this semester. What is good HDI? What is a good design? So there are two concepts that will be guiding our my lectures and discussions.

因此，我今天要介绍的一些重要定义将在本学期中多次重温。什么是好的 HDI？什么是好的设计？因此，有两个概念将指导我们的讲座和讨论。

One is usability. So when you're creating a technology or a system, we're going to try to make something that is useful, that the user can use properly to accomplish a task, and the user will be satisfied with the result.

一是可用性。因此，当你创建一个技术或一个系统时，我们将尝试做一

些有用的东西，用户可以正确地使用它来完成任务，并且用户会对结果感到满意。

So that's the definition of visibility and it's part of like ISO regulation. So we have documents that explain what is a good criminal computer interaction.

这就是可见性的定义，也是 ISO 法规的一部分。因此，我们有文件可以解释什么是好的犯罪计算机交互。

So effective, there's these three concepts. OK, so effectiveness, the user has to be able to complete something. Efficiency has to be able to complete this better with one tool and then without it. And then the satisfaction, the user has to be happy with the results that we haven't yet.

如此有效，有三个概念。好的，所以有效性，用户必须能够完成一些事情。效率必须能够用一个工具更好地完成这项工作，然后不用它。然后是满意度，用户必须对我们尚未获得的结果感到满意。

But broadening up the concept of accessibility is something that's really important for me in this class as well. So accessibility for a lot of people is designing something that is specific for a group of users. So you have some users who have some special needs. I'm going to design something that's going to just help them. The concept of accessibility is broader, broader than this, OK, accessibility. And it's something that you have to design for attending the needs of as many people as possible.

但是，在这门课上，拓宽可访问性的概念对我来说也非常重要。因此，对于很多人来说，可访问性就是为一组用户设计一些特定的东西。因此，您有一些用户有一些特殊需求。我要设计一些能帮助他们的东西。可访问性的概念更广泛，比这更广泛，好吧，可访问性。这是你必须设计的东西，以满足尽可能多的人的需求。

This is very close to universal design, so also trying to make something that's not for the specific group, but a lot of people can use it or a lot of people can adapt for even different needs. But in the accessibility here we're going to try to pick up different aspects. Another thing about usability and accessibility.

这非常接近通用设计，所以也试图做一些不适合特定群体的东西，但很多人可以使用它，或者很多人可以适应不同的需求。但是在这里的可访问性中，我们将尝试了解不同的方面。关于可用性和可访问性的另一件事。

In some definitions you'll be specific, like to an object or product or build environment, or it can also be specific to technology. So the ISO regulations will be already defining accessibility applying for products.

在某些定义中，您将是特定的，例如对象、产品或构建环境，或者也可以特定于技术。因此，ISO 法规已经定义了适用于产品的可访问性。

Services and beauty, environment. But as I said, it's very hard today to dissociate what is technology and what's not technology technological, because the way we use computers, the way computers collect data about us and about how we go about our lives, how we travel and how we leave, everything is integrated, OK? So human computer interaction will be relevant for anything for us as users. So we can reflect on what you're doing in the cautions and try to bring some awareness and make it better.

服务与美丽，环境。但正如我所说，今天很难将什么是技术，什么不是技术与技术区分开来，因为我们使用计算机的方式，计算机收集关于我们的数据的方式，关于我们如何生活，我们如何旅行和如何离开，一切都是整合的，好吗？因此，人机交互对于我们作为用户来说，将与任何事情相关。因此，我们可以反思您在注意事项中所做的工作，并尝试提高一些意识并使其变得更好。

For us as designers, if you're creating technology or improving or in

your professional careers, helping to develop new solutions, but also for me, like everything, even if you're collecting data about, I don't know, forests or air pollution, it has something to do with what's the human impact in the environment. And then all the data that you're collecting, you have to bring it back. And they will probably have a human user that will be trying to understand the sense of the data you collect.

对于我们设计师来说，如果你正在创造技术或改进，或者在你的职业生涯中，帮助开发新的解决方案，但对我来说，就像所有事情一样，即使你正在收集有关森林或空气污染的数据，我不知道，这与人类对环境的影响有关。然后你收集的所有数据，你必须把它带回来。他们可能会有一个人类用户，他们会试图理解你收集的数据的意义。

So it's everything. So clouded service, beauty environment including technologies or not. If your collection data you have someone who has to understand.

所以这就是一切。所以云服务，美容环境包括技术与否。如果你收集数据，你必须有人了解。

So how to achieve a good design? How to achieve a good interface or interaction with the user? We can have a linear process. So if you're working in your ideas, you find a problem, try to understand what's there. Because the solution so visualize could be creating lookups, catches, prototypes and then you.

那么如何实现一个好的设计呢？如何实现良好的界面或与用户的交互？我们可以有一个线性过程。因此，如果你在思考你的想法，你发现了一个问题，试着去理解那里有什么。因为如此可视化的解决方案可能是创建查找、捕获、原型，然后是您。

Bring it to the context, see if it works. So install my light switch. Can I turn the lights on and off? Great. And now I can implement and for some periods of time it implement. Could be. OK, let's go like to the

industry I'm gonna have.

把它带到上下文中，看看它是否有效。所以安装我的电灯开关。我可以开灯和关灯吗？伟大。现在我可以实施，并在一段时间内实施。可能是。好吧，让我们去看看我将要拥有的行业。

Various versions of it, when you're gonna sell lots of units.

它的各种版本，当你要卖很多单位时。

But sometimes we have. How many apps do you have if you search for an app, let's say?

但有时我们有。比方说，如果您搜索一个应用程序，您有多少个应用程序？

Exercise at home.

在家锻炼。

Or even if you look at search for a video like Doing Yoga.

或者，即使您查看搜索像"做瑜伽"之类的视频。

You have thousands of how to get to this point, that you have one thing that the user will find and that the users will find interesting and useful and making sure that they will be coming back. So the only way actually to solve this, or one of approaches, but it's actually the best one, is to is not a linear process. It has to be interactive. You have to like, you learn. So I know it's hard to read, but like you start here, you research, you try to understand what are the user needs. Sometimes you're a designer, but you're also the user. Sometimes you'll be designed a solution that's for a problem that you identified and that's important to you.

你有成千上万的方法达到这一点，你有一件事用户会发现，用户会发现

有趣和有用，并确保他们会回来。因此，真正解决这个问题的唯一方法，或者其中一种方法，但实际上是最好的方法，是不是一个线性过程。它必须是交互式的。你必须喜欢，你要学习。所以我知道这很难读懂，但就像你从这里开始，你研究，你试图了解用户的需求是什么。有时你是设计师，但你也是用户。有时，系统会为您设计一个解决方案，该解决方案针对您发现的问题，这对您很重要。

How to make sure that it can be used for other by other people as well? Or how to get something a specific problem 1 user is facing and create a solution that's universal. So from these we're gonna do like an analysis of what you've learned. You create some ideas of design, you create some prototypes. So before getting to the final product, you create a minimal viable product, you create something that's functional, something that the user can interact with and we're gonna have the chance in this model to see.

如何确保它也可以被其他人用于其他用途？或者如何解决 1 个用户面临的特定问题并创建一个通用的解决方案。因此，我们将从这些内容中分析你所学到的东西。你创造了一些设计的想法，你创造了一些原型。因此，在进入最终产品之前，你创建一个最小的可行产品，你创建一些功能性的东西，一些用户可以与之交互的东西，我们将有机会在这个模型中看到。

Users can interact with a piece of paper, so anything that can represent your design, you can already use to get some feedback and try to.

用户可以与一张纸进行交互，因此任何可以代表您的设计的东西，您都可以使用它来获得一些反馈并尝试这样做。

And then you test and then you implement. But once you implement it, the cycle is not over. Start to producing a few units. Or if you have already a version of a website that doesn't like, you have to continue to evaluate and learn how can I make it better? And then it's like it's ongoing, OK.

然后你测试，然后你实施。但是一旦你实施了它，这个周期就没有结束。开始生产几个单位。或者，如果您已经有一个不喜欢的网站版本，您必须继续评估并学习如何让它变得更好？然后就像它正在进行中一样，好吧。

There are many ways of representing the process of design with many layers. This is the one you're going to see several times throughout the semester I broke down before stages so we have discovered define development delivery. So it's like by the book and this is what we're going to use several times. However, there are many other representations and I'm not going to cover all of them, but just for you to have the 19 and when it's represented in this kind of tool like this kind of.

有许多方法可以用多层来表示设计过程。这是你在整个学期中多次看到的，我在阶段之前分解了，所以我们发现了定义开发交付。所以这就像书本上一样，这是我们将要多次使用的内容。但是，还有很多其他的表示形式，我不打算涵盖所有这些形式，但只是为了让您拥有 19 个，以及当它在这种工具中表示时。

You have an opening face and then a closing face. It's because you have moments of the design that you're creating ideas. Like when you're brainstorming, when you're creating sketches, when you're trying to understand what's going on. You have many, many, many insights. But at some point you have to make a decision and you have to understand like, what's my priority, what should I choose to work further and to move in the process. You can't do everything, otherwise you will be trying to decide like the colors of an electrical bike.

你有一个开放的脸，然后是一个关闭的面孔。正是因为你有设计的时刻，你才在创造想法。就像你在集思广益时，当你在创建草图时，当你试图理解正在发生的事情时。你有很多很多很多的见解。但在某些时候，你必须做出决定，你必须明白，我的首要任务是什么，我应该选择什么来进一步工作并在这个过程中前进。你不能做所有事情，否则你会

试图像电动自行车的颜色一样做出决定。

Before knowing if your user really knows how to ride a bike. So it's this kind of thing if you're going to be generating ideas and then you make a decision based on information and then you try to test if it's the right path before going further.

在知道您的用户是否真的知道如何骑自行车之前。因此，如果你要产生想法，然后根据信息做出决定，然后你尝试测试它是否是正确的道路，然后再继续前进，这就是这样的事情。

So this design approach and opening phase if the goal is like fail fast to succeed. So again I'm not judging your drawing skills, I'm trying to judging your capacity of getting feedback and trying to improve. OK, so we have like several design cycles.

所以这个设计方法和开放阶段，如果目标就像失败一样，快速成功。因此，我不是在评判你的绘画技巧，而是在评判你获得反馈和努力提高的能力。好的，所以我们有几个设计周期。

OK, so that's the design of the thinking part.

好了，这就是思维部分的设计。

We can have a break.

我们可以休息一下。

Be do you need like 5-10 minutes. And when we're when we're back, I'm gonna make an introduction so the history of agci. And then like I always like schedule the activities for like 20-30 minutes so we have this block and then I'm gonna talk about the history of HCI and then I'm gonna talk at the end of all the boring important stuff like grading and assignments and.

你需要5-10分钟。当我们回来的时候，我将做一个介绍，所以agci的

历史。然后，就像我总是喜欢将活动安排在 20-30 分钟左右，这样我们就有了这个块，然后我将谈论HCI的历史，然后我将在所有无聊的重要事情结束时进行讨论，例如评分和作业。

Organizational, OK. So it's 37 and we back like.

组织，OK。所以现在是 37 岁，我们回来了。

10 sheets in the bathroom.

浴室里有10张床单。

So just one question, are you trying to record, Are you recording? Because I'm recording there as well and I'm going to publish on right space, so it's double, but that's fine.

所以只有一个问题，你是在尝试录音吗，你在录音吗？因为我也在那里录音，而且我要在正确的空间上发布，所以它是双倍的，但这没关系。

So.

所以。

Remember, I presented very quickly like what's good design and what's bad design? What's your computer interaction and what's not? Can you just like write down two or three things?

请记住，我很快就提出了什么是好的设计，什么是坏的设计？你的电脑交互是什么，什么不是？你能写下两三件事吗？

Of.

之。

Apps or anything that technology that you like that you use and you like something that you think it's really solving any problem you might have.

应用程序或任何你喜欢的技术，你使用，你喜欢你认为它真的能解决你可能遇到的任何问题的东西。

Like after objects or products. Something that's with a computer, that's to name any app that you like, anything just write down for your own box and two 1-2 or three things that you use that you really like. Your favorite app. I have to think of your favorite app.

就像在物体或产品之后一样。电脑上的东西，就是说出你喜欢的任何应用程序，任何东西都写在你自己的盒子上，还有两个你用的、你真正喜欢的东西。您最喜欢的应用程序。我必须想到你最喜欢的应用程序。

So repeat the task here. Take a note of like 1-2 or three things of acts or products or devices that you really like.

因此，请在此处重复该任务。记下你真正喜欢的 1-2 或 3 件事、产品或设备。

Thinking about.

思考。

It.

它。

Think about your What's your favorite app?

想想你最喜欢的应用是什么？

Or website?

还是网站？

Anyone suggested right? Do you have stories?

有人建议对吗？你有故事吗？

What's wrong? GPS, You know Google Maps?

怎么了？GPS，你知道谷歌地图吗？

VR headsets Are you going? Anybody here interested in gaming?

VR头戴式设备：你要去吗？这里有人对游戏感兴趣吗？

YouTube.

YouTube的。

Social media Please don't tell me you wrote Instagram as your favorite app and you might have Instagram as favorite app.

社交媒体 请不要告诉我你把Instagram写成你最喜欢的应用程序，你可能把Instagram作为你最喜欢的应用程序。

So the other way around, let's try to think what makes it a very poor interaction. Try to write down now 123 apps or technology things that it's always stressing, like you have to start and you have to use it again and you don't like it.

所以反过来说，让我们试着想想是什么让它成为一个非常糟糕的互动。试着现在写下 123 个应用程序或技术，这些东西总是强调，比如你必须开始，你必须再次使用它，但你不喜欢它。

So again, an app is never there when you need could be even like Google Play, you have to be searching for apps forever.

所以再说一次，当你需要的时候，一个应用程序永远不会出现，甚至可能像 Google Play 一样，你必须永远搜索应用程序。

Is this a device?

这是设备吗？

An app or something that runs in the computer.

在计算机中运行的应用程序或内容。

Anybody has a website?

有人有网站吗?

Like examples of four interaction, Amazon here. What is wrong with Amazon? Too much information, Too much information.

像四个交互的例子，亚马逊在这里。亚马逊怎么了？信息太多，信息太多。

Is to see ****.

就是看***。

What should I talk to have the user has too many options?

我应该说什么才能让用户有太多选择?

Anybody else has an example of an app that has like too much distractions? It's hard to choose.

还有其他人有一个应用程序有太多干扰的例子吗？很难选择。

Right space, OK.

合适的空间，OK。

We can use this as like study case that's trying to see how we can make right space better. Bright space like as much or later there are things that I can throw in, things that I cannot control, but still.

我们可以把它用作研究案例，试图看看我们如何才能使正确的空间变得更好。明亮的空间，就像我一样，有些东西我可以扔进去，有些东西我

无法控制，但仍然如此。

How would you rate MST in this? It's interesting because you all have this experience of working like or even learning in person and then fully remote. And there are things that were very interesting to find out when we were in school. We both right.

您如何评价 MST？这很有趣，因为你们都有这种工作经历，甚至亲自学习，然后完全远程。当我们在学校时，有些事情非常有趣。我们俩都是对的。

I don't know project management assignments.

我不知道项目管理任务。

Can have different resources compared when you are in crisis and some lectures in person can be very engaging with some can be very competitive or not just engaging.

当您处于危机中时，可以比较不同的资源，有些面对面的讲座可能非常吸引人，有些讲座可能非常有竞争力，或者不仅仅是引人入胜的。

They're just saying boring, but it is the case.

他们只是说无聊，但事实确实如此。

So I'm going to give you a brief introduction to human interaction, and then we're going to think about how much the scope has changed in the past two years. Remote computer interaction started really like this in the 60s. So originally it was about studying human factors. When you're using technology, it is still human computer interaction or human factors. For software engineering, it is still the same thing, OK, by definition. So when you're thinking about human factors, you're also thinking about ergonomics.

因此，我将给你们简单介绍一下人际互动，然后我们来思考一下过去两

年中，人类互动的范围发生了多大的变化。远程计算机交互在 60 年代就是这样开始的。所以最初是关于研究人为因素的。当你使用技术时，它仍然是人机交互或人为因素。对于软件工程来说，根据定义，它仍然是一回事。因此，当您考虑人为因素时，您也在考虑人体工程学。

So at the beginning it was the ergonomics of using a computer. So the original initial computer like not talking about it was in a big room with a card. But I'm thinking about the desktop. So we have screen. In fact, the one I have here, I have the screen, I have a keyboard, I have a mouse and I have the CPU.

所以一开始是使用计算机的人体工程学。所以最初的电脑就像不谈论它一样，在一个有卡的大房间里。但我正在考虑桌面。所以我们有屏幕。事实上，我这里有一个，我有屏幕，我有一个键盘，我有一个鼠标，我有CPU。

So not everybody will be able to use or not, would not maybe have training not able like physically. But you have training to use a computer when it is launched and it was not accessible, it was not a personal computer, something that you find in specific business. So a person using a computer mainly typing all the time and so the study of the postures would be like seating or standing. And what is the right chair ergonomics and desk ergonomics for a person using a computer for a lot of times.

因此，不是每个人都能够使用或不使用，也许不会像身体上那样进行训练。但是你接受过培训，可以在计算机启动时使用它，并且它无法访问，它不是个人计算机，这是您在特定业务中找到的东西。因此，一个人使用计算机主要一直在打字，因此对姿势的研究就像坐着或站着一样。对于经常使用计算机的人来说，什么是合适的椅子人体工程学和办公桌人体工程学。

For a long period of time, to avoid trouble, to avoid disorders, to avoid fatigue. So there is recommendations and it's too bad for you. Usually

you look at the screen 10 to 20 minutes and then you have to just stop and look at something that's distant. Just to distract, to distract your own eyes and to make it healthier for you, OK?

长期使用，避免烦恼，避免紊乱，避免疲劳。所以有建议，这对你来说太糟糕了。通常你看屏幕 10 到 20 分钟，然后你不得不停下来看一些遥远的东西。只是为了分散注意力，分散你自己的眼睛，让它对你来说更健康，好吗？

So the basic is because people are interacting with computers because they need to input some information. So you have the screen where we looking at the results and you'll be typing information in the keyboard and you'll one knows the history of the keyboard layout.

所以最基本的是因为人们正在与计算机交互，因为他们需要输入一些信息。因此，您有一个屏幕，我们可以查看结果，您将在键盘中输入信息，并且您将知道键盘布局的历史。

Because why is it? Why it's not on alphabetical order?

因为为什么会这样？为什么不按字母顺序排列？

Any guesses?

有什么猜测吗？

That's absolutely true. So the letters have been disposed in a way, and it's related to the frequency that we use them. How do you think this frequency is distributed here?

这是千真万确的。所以这些字母在某种程度上被处理掉了，这与我们使用它们的频率有关。您认为这个频率在这里是如何分布的？

So if I'm typing, what are my fastest fingers?

那么，如果我在打字，我最快的手指是什么？

Like the index.

就像索引一样。

And what is the slowest thing is that has the last dexterity?

最慢的东西是什么，它有最后的灵巧性？

The baby finger.

婴儿手指。

So how do you think it's it relates to our ability to use our fingers? How do you think it relates to the design of the keyboard?

那么，你认为这与我们使用手指的能力有什么关系呢？您认为它与键盘的设计有什么关系？

Anybody knows the research? Yeah.

有人知道这项研究吗？是的。

So let's talk with most mostly the sector and those.

因此，让我们与大多数行业和那些人交谈。

OK, so you think the center is for the high dexterity or the opposite?

好吧，所以你认为中心是为了高灵巧性还是相反？

High dexterity and high frequency of letters that we use. OK, so I yes, ideally, ideally we will have if I have more dexterity with the like the index fingers and the fingers that I have like inside my head already over to my body, this would be the center. OK this would make sense. So I have more ability with my index finger. So the letters that I use the most will be the center and the letters that I use the last the least will be at the border.

我们使用的字母的灵活性和高频率。好吧，所以我是的，理想情况下，理想情况下，如果我有更多的灵活性，比如食指和我脑袋里的手指已经到我的身体，这将是中心。好吧，这是有道理的。所以我的食指能力更强。因此，我使用最多的字母将是中心，而我最后使用最少的字母将在边框。

However, the design has been completely reversed. It's the opposite because the history of the layout of our keyboards.

然而，设计已经完全颠倒过来。恰恰相反，因为我们键盘布局的历史。

Can take it here rely on the history of the typewriters and the typewriters it's going to be the physical device. So every time you hit a key you have this let's say hammer on the other side that will be printing the letter on the paper. And what happened is like they made a design initially alphabetically or made. I haven't come across to a design where you definitely use like the most keys in the middle and the others. So I thank you for first alphabetically, but what happened?

可以把它带到这里，依靠打字机的历史，而打字机将成为物理设备。所以每次你敲击一个键时，你都会在另一侧有这个锤子，它将把字母打印在纸上。发生的事情就像他们最初按字母顺序设计或制作一样。我还没有遇到过一种设计，你肯定会在中间和其他键中使用最多的键。所以我首先按字母顺序感谢你，但发生了什么？

People who would be learning how to type, and this is probably like word related. So you'll be hiring people to type letters and it will be maybe like a female work talking about.

正在学习如何打字的人，这可能与单词有关。因此，你会雇用人们来打字，这可能就像一个女性工作在谈论。

People and things related to words and people have died writing a lot of letters, but you've seen how fast a person can type so any kind of layout. They were typing so fast. And with a typewriter physical one,

what happens if you type 2 keys at the same time?

与文字和人有关的人和事已经死了，写了很多字母，但你已经看到一个人打字的速度有多快，所以任何一种布局。他们打字的速度太快了。使用物理打字机，如果您同时键入 2 个键会发生什么？

The hammers will kind of get jammed.

锤子会有点卡住。

Cross and then you have to. You either broke the machine or you have to stop.

交叉，然后你必须。你要么弄坏了机器，要么你必须停下来。

Put things in place again before I start typing. So it was very time consuming. Every time you type so fast you type faster than the device is capable of handle and then the key to get jammed. So you have to stop correcting the device and start typing again. So they may they change the designing purpose. They put the less frequent letters where we have less strength and last dexterity in our fingers and on the corners on the borders we have the letters that we use.

在我开始打字之前，再把东西放到位。所以这是非常耗时的。每次你打字的速度都比设备能够处理的速度快，然后钥匙被卡住了。因此，您必须停止更正设备并重新开始打字。因此，他们可能会改变设计目的。他们把不太频繁的字母放在我们手指的力量和最后的灵巧性较差的地方，放在边框的角落里，我们用的字母。

With less.

用更少的钱。

With less frequency.

频率较低。

Yeah, with more frequency, but when your fingers have less dexterity.

是的，频率更高，但当你的手指不那么灵巧时。

What happen? Does did it solve the problem?

会发生什么？它解决了问题吗？

Did you solve the problem? Not really, because we can still learn how to type very fast, even in the keyboard. However, even today with tablets and smartphones, you still have a QWERTY or AZERTY design, because then we'll be adapting the design for different languages.

你解决了问题吗？不是真的，因为我们仍然可以学习如何非常快速地打字，即使在键盘上也是如此。然而，即使在今天使用平板电脑和智能手机，您仍然拥有 QWERTY 或 AZERTY 设计，因为那时我们将针对不同的语言调整设计。

We're still looking at frequency of letters and how do you like, how do you spell most of the words? But it was always being this kind of counterintuitive way. But then when we transition from the physical typewriters to the desktop computers.

我们仍在研究字母的频率，你喜欢什么，你如何拼写大多数单词？但总是这种违反直觉的方式。但是，当我们从物理打字机过渡到台式计算机时。

And even the personal computers, the users who are mostly trained to do this kind of activity could be, yes, secretary, so woman that he'll be typing, typically woman that would be typing letters. And then you kept the same layout, because even if it's not gender based, but even if anybody will be used to a typewriter, I think about if you're transitioning to a desktop computer, you don't want to learn layout of the keyboard. Again, anybody here type with two different layouts of keyboards, like different languages?

即使是个人电脑，那些受过这种训练的用户也可能是，是的，秘书，所以他会打字的女人，通常是打字的女人。然后你保持相同的布局，因为即使它不是基于性别的，但即使任何人都会习惯打字机，我想如果你要过渡到台式电脑，你不想学习键盘的布局。再说一遍，这里有人用两种不同的键盘布局打字，比如不同的语言？

How many layouts of keyboards? Yes, for me it's the same. Sometimes at the beginning it's confusing. You keep typing the wrong thing, and several times at some point you get used to it. So you sweet like, it's like her brain can leave and learn differently out of the keyboard. But the like a touch screen could make sense to have. Like alphabetically. Because we don't, we don't need the two hands to type, right?

键盘有多少种布局？是的，对我来说是一样的。有时在开始时会感到困惑。你总是输入错误的东西，有几次在某个时候你会习惯它。所以你很甜蜜，就像她的大脑可以离开键盘并以不同的方式学习一样。但是像触摸屏一样是有意义的。按字母顺序排列。因为我们不需要，所以我们不需要两只手来打字，对吧？

So now the device advances. So this is still very old, so.

所以现在设备进步了。所以这还是很老的，所以。

Graphical interfaces. Now we need things like we need pointers, something that we can interact with objects that are directly constrained. So this is like the initial designs for the mouse. It has changed a lot since then, so some designs that are more recent and the idea is to give an input so but you're moving the coarser in a flat surface horizontally and you have this represented on the screen vertically the way you're looking.

图形界面。现在我们需要一些东西，比如我们需要指针，我们可以与直接受约束的对象进行交互。所以这就像鼠标的初始设计。从那时起，它已经发生了很大变化，所以一些较新的设计，其想法是提供输入，因此您在平面上水平移动较粗的表面，并将其垂直显示在屏幕上，以您看起

来的方式。

And nowadays you can connect directly where you have the input and the output at the same time. When you have the input in a flat surface and the output in a vertical surface, you can work with different directions.

如今，您可以直接连接到同时具有输入和输出的位置。当输入位于平面而输出位于垂直曲面时，可以使用不同的方向进行处理。

Maybe you do a quick movement here and you go very far. There are other factors with many interaction directory to the screen. Some things are better and user easier because you exactly where you're going. But there are other things that are confusing as well because your hand is in the front of the screen, so maybe the screen is not appropriate for every kind of design.

也许你在这里做一个快速的动作，你走得很远。还有其他因素与许多交互目录到屏幕。有些事情更好，用户更容易，因为你正是你要去的地方。但是还有其他令人困惑的事情，因为您的手在屏幕前面，所以屏幕可能并不适合每种设计。

So let's think about this. Can you also think about other interface types?

所以让我们考虑一下。您还能考虑其他接口类型吗？

What else can you use to ask input and output?

你还能用什么来询问输入和输出？

Keyboard.

键盘。

The people who are attention lecture online, you can use the chat.

关注的人在线讲课，您可以使用聊天。

We're talking about, we talked about for the light switches. We also talked about sensors. So you can like just capture your precipice in or out of the room. The sensors can work, can be like time of flight, can be using your like the distance in relation to an object or to the capture to the sensors. It can also be heat. There are cameras that can detect heat, cameras that can detect movement.

我们谈论的是，我们谈论的是电灯开关。我们还谈到了传感器。因此，您可以像在房间内外捕捉悬崖一样。传感器可以工作，可以像飞行时间一样，可以使用你喜欢的距离与物体或捕获到传感器。它也可以是热。有可以检测热量的摄像头，可以检测运动的摄像头。

And yes, of course we can also use colors and image recognition. So we have a voice. We can because we can't detect voice. You can also just detect noise or absence of noise or how much noise you have. We have cameras specific, like for cars, for animals, for people. We have facial recognition, we have done fingerprints.

是的，当然我们也可以使用颜色和图像识别。所以我们有发言权。我们可以，因为我们无法检测到声音。您也可以只检测噪音或没有噪音或您有多少噪音。我们有专门的相机，比如汽车、动物、人。我们有面部识别，我们做过指纹。

Eye scans.

眼部扫描。

They're what? Yes, those sensors. Do you have another example for sensors? What's how many sensors are in your smartphone?

他们是什么？是的，那些传感器。您还有传感器的另一个例子吗？您的智能手机中有多少个传感器？

So we have sensors for movement. We have sensors for light.

所以我们有用于运动的传感器。我们有光传感器。

And sensors for noise, everything is going to be adapted.

而噪声传感器，一切都将得到调整。

But my thing here, let's think about the user. Now what would be the idea of the user? So if I have a sensor for movement, how fast or how slow should the movement the user move? I have a sensor for heat, what's the ideal temperature? Of course we can capture this, but what happens if it's not in this standards?

但是我在这里的事情，让我们考虑一下用户。现在用户的想法是什么？因此，如果我有一个用于移动的传感器，用户应该移动多快或多慢？我有一个热量传感器，理想的温度是多少？当然，我们可以捕捉到这一点，但如果它不在这个标准中会发生什么？

So what puts the perfect user look like?

那么，如何打造出完美的用户呢？

When you are typing the keyboard, don't you kind of feel that this would be the ideal hand so you can reach every single key?

当你在键盘上打字时，你不觉得这将是理想的手，这样你就可以接触到每一个键吗？

How many examples of interaction we can find where instead of adaptive interface to the user, the user is adapting their own body to interact?

我们能找到多少交互的例子，其中用户不是自适应用户界面，而是调整自己的身体进行交互？

Look at the person using a mobile phone.

看看使用手机的人。

Usually it's like your right hand and then you use or you have to use your left hand because the right hand is doing something else and then you have your neck that's bent. OK, what's the ergonomics of use of mobile if you're using a mobile phone? I don't know if you're bad. You're sitting in a couch or hiding under the desk or hiding under like in the car.

通常它就像你的右手，然后你用，或者你必须用你的左手，因为右手在做别的事情，然后你的脖子弯曲了。好吧，如果您使用的是手机，使用移动设备的人体工程学是什么？我不知道你是不是坏人。你坐在沙发上，或者躲在桌子底下，或者躲在车里。

So what's the ergonomics of all those different devices that are not just desktop?

那么，所有这些不仅仅是台式机的不同设备的人体工程学是什么？

The ergonomics of using a laptop in your lap, like how what's the position of your back 20 times?

在膝盖上使用笔记本电脑的人体工程学，比如你的背部 20 次的位置如何？

The ideally in this module.

理想情况下，在此模块中。

Design things instead of more comfortable for the user and the things that we adapt to the user ability. Instead of asking the users to like bend themselves to feel a specific area designed for an interaction, so cameras, they would be detecting a specific field their Leap Motion. It's like infrared used for gesture detection, but if you're limited in a

specific space.

设计的东西而不是更让用户舒服的东西，以及我们适应用户能力的东西。他们不会要求用户喜欢弯曲自己来感受为交互而设计的特定区域，而是通过摄像头来检测他们的 Leap Motion 的特定区域。这就像用于手势检测的红外线，但如果你被限制在特定空间内。

So we can have the perfect product and we can also have like the perfect user.

因此，我们可以拥有完美的产品，也可以拥有完美的用户。

So as I said, so interaction we have input usually from the user side a black box.

所以正如我所说，交互我们通常从用户端输入一个黑匣子。

In this module, we're not interested in what's happening in the part of development and processing. We're going to look straight. We're going to bypass this and look at the output. So input, usually from the user, and whatever kind of outputs you can thinking of, it has to be meaningful for the user as well.

在本模块中，我们对开发和处理部分发生的事情不感兴趣。我们要直视。我们将绕过这一点并查看输出。因此，输入，通常来自用户，以及你能想到的任何类型的输出，它也必须对用户有意义。

So there's many things related to this. Let's get back. So as the examples there, because we're not using a specific approach, devices like keyboard or mouse only, we're going to be, we're able now with computers collect a lot of data that will be used as input for interaction or for the way things are designed. We're much further than just desktop computer keyboard and maps. So there are terms and topics that you're going to discuss like ubiquitous interaction, Internet of Things, autonomous vehicles.

所以有很多与此相关的事情。我们回去吧。因此，正如那里的例子一样，因为我们没有使用特定的方法，只有键盘或鼠标等设备，我们现在能够用计算机收集大量数据，这些数据将用作交互或设计方式的输入。我们远不止台式电脑键盘和地图。因此，您将要讨论一些术语和主题，例如无处不在的交互、物联网、自动驾驶汽车。

Talk about this as well. And all this data centric computer.

也谈谈这个。以及所有这些以数据为中心的计算机。

So to understand this, there's a lot of topics that we actually alert and explore. So all the human factors need to help with modalities. But also how to apply a user centered design, how to take the design thing from the approach that we started today, but try to think the way the user thinks, OK, who are we to solve someone else's problem? How do you, how can we put yourself, keep humans in the loop, making sure that the output makes sense for the kind of users that you are targeting?

因此，要理解这一点，我们实际上需要提醒和探索很多主题。因此，所有的人为因素都需要帮助模式。还要如何应用以用户为中心的设计，如何从我们今天开始的方法中获取设计的东西，但试着用用户的想法来思考，好吧，我们是谁来解决别人的问题？你如何，我们如何让自己，让人类参与进来，确保输出对你的目标用户类型有意义？

All the considerations and techniques and design and many interdisciplinary skills and design skills.

所有的考虑因素和技术以及设计以及许多跨学科的技能和设计技能。

It's very important for me that you develop some interpersonal communication skills as well. So there is other abilities like even project management, the way you organize design and the way you're going to report that back to me. Because the documents that you should reach, it's not just for me to assess your learning, it's also a document that shows that you've been here and you've done your work and some

people will be using to evaluate the quality of the course of the teaching. So those documents are.

对我来说，培养一些人际沟通技巧也非常重要。所以还有其他能力，比如项目管理，你组织设计的方式，以及你向我报告的方式。因为你应该拿到的文件，不仅仅是我评估你的学习，它也是一份文件，表明你来过这里，你已经完成了你的工作，有些人会用它来评估教学课程的质量。所以这些文件是。

So this is kind of a broad scope of all the related disciplines to human computer interaction.

因此，这是与人机交互相关的所有学科的广泛范围。

Slide So this is the syllabus and the outline of the learning article comes off this module. Everything is going to be on right space by next lecture. I'm trying to do this today in this module. By engaging with the course material, you have the bridge to define and develop and try to design or even evaluate your project. The tools and techniques will be applied in a project and should be documented. It's not exactly a final presentation.

幻灯片：这是教学大纲，学习文章的大纲来自这个模块。到下一堂课，一切都会在正确的空间上。我今天在这个模块中尝试这样做。通过参与课程材料，您拥有定义和开发并尝试设计甚至评估您的项目的桥梁。这些工具和技术将应用于项目中，并应记录在案。这并不完全是最终的演示。

This is all the keywords on different topics that I like collected and try to make visualization from this topic in last year, so there's plenty of things that are going to be covered. If there are specific things that I just go very quick and you're interested in, you can let me know and I bring more material.

这是我喜欢收集的不同主题的所有关键字，并尝试在去年从这个主题进

行可视化，因此将涵盖很多东西。如果有什么具体的事情我很快就走了，你感兴趣，你可以告诉我，我会带来更多的材料。

So funding areas ourselves with all the academic regulations and procedures for University of Limerick, I'll put the link right space. This talks about how the assignment should be designed, how the horse is evaluated, and what are all the procedures. If you feel unwell, if you need help at any time, what's the kind of student support that is available?

因此，通过利默里克大学的所有学术法规和程序来资助我们自己，我将把链接放在正确的空间。这谈到了应该如何设计任务，如何评估马匹，以及所有程序是什么。如果您感到不适，如果您在任何时候需要帮助，可以获得什么样的学生支持？

I'm going to publish as well the module handbook. What's going to happen throughout the semester? What are my expectations? And try to see if I can meet yours OK?

我还将出版模块手册。整个学期会发生什么？我的期望是什么？试着看看我能不能见到你的好吗？

It's important for me to that everybody's opinion here is considered so dignity, respect and integrity. When you do something, you put your name on it. The sense of belonging and ownership is important, But because there will be lots of collaborative activities, other people can use it too, but they have to mention who did it first.

对我来说，重要的是，这里的每个人的意见都被认为是尊严、尊重和正直的。当你做某事时，你把你的名字写在上面。归属感和主人翁感很重要，但因为会有很多协作活动，其他人也可以使用它，但他们必须提到谁先做了。

You're going to do a lot of group work and it's OK for me if some of you do things together and submit exactly the same report. However, you

have to mention each others name. If I find identical reports with individual names to see how like, how can I make sure who did it? So you have to specify what were the roles, who did what and how. What's your individual contribution? Contribution to the group work? The easiest way to contact me is by e-mail.

你们将做很多小组工作，如果你们中的一些人一起做事并提交完全相同的报告，对我来说没关系。但是，您必须提及彼此的名字。如果我发现具有个人名称的相同报告，请看其相似程度，我如何确定是谁干的？因此，您必须指定角色是什么，谁做了什么以及如何做。你的个人贡献是什么？对小组工作的贡献？与我联系的最简单方法是通过电子邮件。

But I'm also online on Ms. Teams in most days.

但我在大多数日子里也都在 Ms. Teams 上在线。

I'll keep Wednesday. The education is full time for this model, so if you ever send me an e-mail on a Wednesday, I'll try to respond straight away. Sometimes you have to wait until next Wednesday. I have about 140 students this semester, so be specific. Mention your name, your model, the guard. So what's course? What course are you taking? And if I don't respond immediately, it's because maybe I received many queries and maybe it's something that I need to address in person. So I'm going to talk in the like the next time we see you in the next lecture.

我会保留星期三。这个模型的教育是全日制的，所以如果你在星期三给我发电子邮件，我会尽量立即回复。有时你必须等到下周三。我这学期大约有 140 名学生，所以要具体一点。提到你的名字，你的模特，警卫。那么，这到底是怎么回事呢？你选修什么课程？如果我没有立即回复，那是因为也许我收到了很多查询，也许这是我需要亲自解决的问题。因此，下次我们在下一堂课上见到你时，我会用类似的方式说话。

So that's the organization for the model. This semester we have our lectures 11:50 in this room, except the days I'm going to define as online, but you can still use the room because it will be available.

Undergraduate students have been assigned to tutorials, so there are two groups of tutorials. Group B, it's today 3:00 to 4:00, today no at the Wednesday 3:00 to 4:00. And Group A is 4 to 5.

这就是模型的组织。本学期我们在这个房间里上课 11：50，除了我将定义为在线的日子，但你仍然可以使用这个房间，因为它将可用。本科生被分配到辅导班，所以有两组辅导班。B组，今天是 3：00 至 4：00，今天不是周三 3：00 至 4：00。A组是 4 比 5。

I really invite all the postgraduate students.

我真的邀请了所有的研究生。

And even the Erasmus, If you're not allocated automatically, let me know. I really invite you to try to join the tutorials if you're available, because we have lots of interactive activities and collaborative activities in class, but the tutorial is the time for you to practice, to work on your assignments, to get feedback from peers and even from the Tasmania, and to try to get all the material done.

甚至伊拉斯谟，如果你没有被自动分配，请告诉我。如果你有空，我真的邀请你尝试加入教程，因为我们在课堂上有很多互动活动和协作活动，但教程是你练习、完成作业、从同龄人甚至塔斯马尼亚获得反馈的时间，并尝试完成所有材料。

So we have, we're very lucky we have two teaching assistants for this. Model 1 is Alan T writing Who's There? And I think most some of you are already familiar. Alan, I'm talking about you. Just raise your hand for this.

所以我们有，我们很幸运，我们有两名助教。模型 1 是 Alan T 在写 Who's There？我想你们中的大多数人已经很熟悉了。艾伦，我说的是你。请为此举手。

And you also have beyond who could not come today. But you'll be

meeting me soon. The tutorials start next week. OK, sure, it starts on week two. This information is already on bright space. Tutorials will be in this room. I have to go there and see how it is. I think it's not a very fancy room. I would prefer a room with desks and tables that can move around and.

你也有超越谁今天不能来。但你很快就会见到我。教程将于下周开始。好的，当然，它从第二周开始。这些信息已经在明亮的空间上。教程将在这个房间里。我必须去那里看看情况如何。我认为这不是一个非常华丽的房间。我更喜欢一个有桌子和桌子的房间，可以四处走动。

Walls. You can paint things on each. I'm not sure it's dead, so I'm going to bring more things, more digital tools for you to use like shared links for shared folders and you can share the material used with like between you and also share it with me so I can get. I can give you feedback as soon as I can.

墙壁。你可以在每个上画东西。我不确定它是否已经死了，所以我会带来更多的东西，更多的数字工具供你使用，比如共享文件夹的共享链接，你可以分享你们之间使用的材料，也可以与我分享，这样我就可以得到。我可以尽快给你反馈。

Yes, so.

是的，所以。

I'm enabling remote attendance. As I said, the link is also in bright space, so I already had fifteen people, 5050 person joining today.

我正在启用远程考勤。正如我所说，链接也在明亮的空间中，所以我已经有十五个人，今天有 5050 人加入。

OK, leader note on module material and even video recordings. It's bespoke and making everything here for you for this class only, you should not share.

好的，关于模块材料甚至视频记录的领导说明。它是定制的，这里只为你制作这门课的一切，你不应该分享。

So this includes the assignments, Reading tests, everything.

所以这包括作业、阅读测试，一切。

Every student work, you're not allowed to collect data or even to run surveys and talk to users, like for user tests outside the model. If you're collecting data or involving participants in the university of numerical Regulation, say you need antics approval. You need to describe what you're going to do, are people informed of what you're going to do, And you need to get this before you can start. So we're not going to do this, but this is a large class, so you can. You have lots of opportunities to get feedback inside the class.

每个学生都工作，你不被允许收集数据，甚至不允许进行调查和与用户交谈，比如在模型之外进行用户测试。如果您正在收集数据或让数字监管大学的参与者参与进来，请说您需要滑稽的批准。你需要描述你要做什么，人们是否被告知你要做什么，你需要在开始之前得到这个。所以我们不打算这样做，但这是一个很大的类，所以你可以。你有很多机会在课堂上获得反馈。

You're allowed to have some informal feedback. Just keep in mind we'll be evaluating the design, not people, so you don't have to collect any kind of personal data. Personal data privacy, data collection, and ethics is the topic of our lecture next week. OK, so it's the same for the video recording. Video recordings is for you, You're not supposed to be sharing.

您可以获得一些非正式的反馈。请记住，我们将评估设计，而不是人员，因此您不必收集任何类型的个人数据。个人数据隐私、数据收集和道德是我们下周讲座的主题。好的，视频录制也是如此。视频录制是给你的，你不应该分享。

I'll have, I'll have to work better, at least I need some confirmation, but we're gonna have like 4 lectures that we're gonna run online. So far it's like 3-4 and then 6:00 and 9:00, but I'm gonna spread this around so don't take pictures that it's not confirmed. But I've got to be publishing by next week and then the tutorials. I've designed all them to be done in person, so if you need extra guidance you can contact the Tasmania or myself.

我会的，我必须做得更好，至少我需要一些确认，但我们将有 4 场讲座，我们将在网上进行。到目前为止，它就像 3-4 岁，然后是 6：00 和 9：00，但我要把它传播开来，所以不要拍未经证实的照片。但我必须在下周发布，然后是教程。我已将所有这些设计为亲自完成，因此如果您需要额外的指导，可以联系塔斯马尼亚或我自己。

OK, that's my assignment distribution.

好了，这就是我的任务分配。

One sorry, let me find this here.

对不起，让我在这里找到这个。

Three main assignments that each one of you have to upload on right space. OK, so the assignments you're going to prepare, prepare a file. I prefer a PDF. Try to stick to this and you individually. You have to make sure that you submit 3 reports on right space by the end of the semester. OK, I'm going to post the assignments as soon as I can. It's probably like week four, week 6, and week eight. I would.

你们每个人都必须在正确的空间上传三个主要任务。好的，所以你要准备的作业，准备一个文件。我更喜欢 PDF。试着坚持这一点，你个人。您必须确保在学期末提交 3 份关于正确空间的报告。好的，我会尽快发布作业。大概是第四周、第六周和第八周。我会。

Prefer if you can submit the results of the assignment like two weeks

after. I usually give like two or three weeks for it as a deadline.

如果您可以在两周后提交作业结果，则最好。我通常会给它两到三周作为截止日期。

However, I know it's short, so if you don't have the time to do it, or if you think it's not good enough, you can take more time to prepare and to work on this. And the final deadline will be on week 14, so I think it's the 2nd of May. OK, I'll put all the dates on right space and I can remind you of this next week as well. So we have 3 reports. One is the User Center Design canvas. I'll give all the instructions and templates so you know how you're going to be evaluated or have the rubric as well. This is an individual one.

但是，我知道它很短，所以如果你没有时间去做，或者你认为它不够好，你可以花更多的时间来准备和工作。最后的截止日期是第14周，所以我想是5月2日。 好的，我会把所有的日期放在正确的位置，下周我也可以提醒你。所以我们有 3 份报告。一个是用户中心设计画布。我将提供所有说明和模板，以便您知道如何评估或制定评分标准。这是一个个人的。

The second one, the reports will be at the end of the term. So all the activities you'll be doing in class and during the tutorials and all the extra activities that are going to give us homework, you have to keep your kind of sketchbook, keep a like a record of everything that you're doing so you can prove that you've been engaging with the material and that you've been trying your best and you're trying to get feedback.

第二个，报告将在学期结束时发布。因此，你在课堂上和教程中所做的所有活动，以及所有会给我们家庭作业的额外活动，你必须保留你的速写本，记录你所做的一切，这样你就可以证明你一直在参与材料，你一直在尽力而为，你正在努力获得反馈。

At the end of the term when I published it assignment brief, you can

select the material that you want to put to like to report for evaluation. So if you have a lot of things that you have done and you have recorded, then it's great you have. You can select the ones that you're more proud of. However, I had like in the past, the students were doing brainstorming using Snapchat with messages that were disappearing. So they can't even prove to me that they have done a brainstorming. OK, so try to.

在学期结束时，当我发布作业简报时，您可以选择要报告的材料进行评估。所以，如果你有很多事情已经完成并记录了，那么你拥有它就很棒了。你可以选择你更引以为豪的那些。然而，我和过去一样，学生们正在使用 Snapchat 进行头脑风暴，消息正在消失。所以他们甚至无法向我证明他们已经进行了头脑风暴。好的，所以试着。

Record. You have to capture everything that you're doing. Use the screenshots. It's short notice.

记录。你必须捕捉你正在做的一切。使用屏幕截图。这是很短的通知。

So this is individual, this is individual. Designer part is an individual submission, but you can report group work. OK, you the design. The first design canvas is like personal work, the design report. You can work in groups, but everybody has to submit to their own file. And the heuristics evaluation is something at the middle of the semester you're going to work in groups, I'm going to sign you into groups and there is specific deadlines for this. OK and.

所以这是个人的，这是个人的。设计人员部分是个人提交，但您可以报告小组工作。好的，你的设计。第一个设计画布就像个人作品，设计报告。您可以分组工作，但每个人都必须提交自己的文件。启发式评估是在学期中期，你要分组工作，我会把你签到小组中，并且有具体的截止日期。好的。

This, but again, we have to make sure that every person has groups who meet you the version.

但是，我们必须确保每个人都有与您会面的小组。

OK. So that's all that I had for today actually.
还行。这就是我今天的全部内容。

Thank you for coming.
感谢您的光临。

Lecture and I see you in next Wednesday.
讲座，我下周三见。