 Please stand by for realtime captions.

>> Hello everyone, I am the training manager and I want to welcome you to today's webinar. I am going to turn it over to Lisa Nelson here at the centers for excellence, Salida -- so Lisa?

>> Hello everyone I am so glad that we were able to get Eric Hackathorn to present today and just a little bit of background, games are not just for kids anymore. Gartner has projected a 50% corporate innovation will begin if I'd -- will be gamified in the next few years. There will be significant advances leading to gamification adoption and use and [Indiscernible] and Eric will talk a little bit more about that. There was several massive multiplayer games. -- They also created one recently, there was exposure to uncertainty is due to the terrorism. There is a challenge go apps for healthy kids. -- I like to introduce our presenters today, Eric Hackathorn who is a program manager for fragile earth studios operating within the national oceanic and atmospheric Association and the program leverages game mechanics and technology for a variety of projects is unique experience and science, education, and entertainment.

>> Recently under the leadership of the White House office of science and technology policy, Eric to establish the federal game field as I mentioned before the goal to this was to have knowledge sharing, collaborate on shared challenges, and help identify a cross agency needs. With that, I'll turn it over to Eric.

>> Inc. you Lisa, much appreciate it -- thank you Lisa, much appreciate it. Today's talk is game on! How can gamification work in government? Let's talk about what it is not. It is not necessarily using games for video games in the workplace but about using the mechanics of gaming. The mechanics of gaming have been around since the dawn of time and what we're talking about here today is leveraging game mechanics within our products to increase engagement on interactivity is.

>> I thought it would be fun today to do a little bit of gamification presentation and S. Sandra mentioned earlier throughout the presentation will be throwing in trivia questions and sortable format late Who Wants to be A millionaire. Stay engaged and be involved and be aware of that chat box which is part of the meeting product.

>> A little bit more on gamification. It is straight off Wikipedia and integrate game day max -- game dynamics into your site, service, community, content, or campaign in order to drive participation your is typically applies to nongame applications as I mentioned before. In order to encourage people to adopt those products, or to influence how they are used. In medication works by making technology more engaging and also encourages users to engage in desired behaviors. It shows a path to mastery so in

other words you have novices who come in and as they spin in -- as they spend time with your product make it better, essentially leveling up and we will talk about leveling in a bit. The idea is to give them a path to mastery by helping to solve problems, and you don't want them to be a distraction or get in the way, but instead ticket package of human, psychological perception and predisposition to engage in gaming. This is really a very low level, almost a biological nature and the need that people have.

>> Really, we all have the best intrinsic desire to be the best possible people that we can be, and to make the world its maximum potential. Many of us lack the discipline required to get to that goal so what games do is to expose, and to sort of simplify, and make fun these complex systems and hopefully increase engagement along the way to allow us to accomplish something inspirational at the same time.

>> That in a nutshell is gamification and will be diving into it as we continue on the talk. First I thought it would be fun to just have a couple of quick questions about games themselves. Hopefully some of you recognize this game.

>> [Game example on video]

>> Just a short preview blurb. My first question is, Sondra, this would be your cue, what is the combined usage time of all the people in the world playing World of Or craft exhibition point exhibition .25 years, 2000 years, 400,000 years, or 6 million years? If everything goes according to plan, if you look at your chat box, any second now you can see that the polling is open.

>> Eric Thomas we have results coming in and you guys are quick.

>> Very good to hear.

>> Yep. We'll give you guys a couple of more minutes. It looks like everybody who has voted is done so I will go ahead and close it. I will share the result. So Eric, it looks like people are saying the results are D, what do you think?

>> 6 million years, is that everyone's final answer? That is durable. You are absolutely correct. Since it opened 10 years ago people have spent over 6 million years playing that game which incidentally, is about the same amount of time humans have stood upright since the full thing -- since evolving from the apes. My question from the group and it is kind of rhetorical, what would happen if we put that energy towards producing something real and something that actually benefited the real world? Some quick economic statistics, this World of World crackhouse over 12 million subscribers which each pays about $15 million per month which quick math creates $1.8 billion a year in -- a month so that is usually profitable and is also hugely engaging and entertaining. I'm sure some of us would love to see a fraction of the amount of that energy to be applied to some of our missions statements and goals. One more game question before we move on.

>> [Game example on video]

>> While hopefully some of you recognize that game and that of course is Angry cat herbs. -- Angry Birds. The question is how many pages have been popped in the game Angry Verbs? 20 trillion, 3 trillion, 5 billion, or 40 million? I believe you should be able to answer that now.

>> The poll is open now and we have results coming in. There are a lot of you guys out there that play Angry Birds. Okay. There are a couple of people that are still thinking. All right, it looks like we've got everybody so I will go ahead and close the poll. I will go ahead and share the result. So it looks like Eric, everyone said A .

>> People are going for the extreme answers in this case I see. But I psych you out. 3 trillion. As of last year. But that is still a pretty sizable number of pigs if you ask me. Again, some quick statistics, the initial version of Angry Birds was about 150 K. to develop and as of last year it had generated over $73 million in revenue and counting. They made a major movie deal, a big participation in Rio if you happen to see that in theaters, there are over 217 million players, and every hour 16 years of gameplay occurs, so again, there are enormous amount of potential energy going into these games and part of the goal of gamification is to figure out how to take that energy and apply it to things that actually make a difference in the real world and that is where we are really getting into today's top.

>> So I would like to cover for major things, and these were outlined in the summary that went out. We're going to take a look at gamification to see how we can gauge customers, we are going to see how why gamification motivates user behavior and we will take a look at a couple of examples from other organizations to see how we are using games to help with the mission or organizational needs, and finally, we'll take a quick look at the Federal Games Guild started last November by the White House and look at how you can get involved more.

>> First we'll take a look at gamification. Today we will cover three types of mechanics. There are tons of different types of mechanics but unfortunately we don't have time to cover them all. I chose leveling, leaderboard, and averages are still leveling, it indicates progress but it serves as a marker for prayer -- players to serve and the gaming experience, think about the educational system or you go from high school to bachelors to Masters to PhD programs. Essentially that is the type of leveling system.

>> One thing to note is that leveling is not necessarily linear. In other words, easy levels go by quickly. It encourages players to see definite improvement early on, or awarded more readily and then in the later more difficult levels it takes more time. Leaderboard serve to make simple comparisons so if you think of the top 10 scoreboard essentially, there is a lot of granularity in the ways that is implemented we will discuss in a bit, but one potential example for leaderboard might be something like clout. For those of you who are familiar with the social networking site called Clout, it takes a look at your social output and ranks it according to other people to see where you fit in in terms of what people are listening to read

>> Finally, badges which are sometimes called achievements, they perform a number of functions for design, but mostly they are used to demonstrate status or progress. An example of a site that uses a lot of badges might be something like For Square for those of you who are familiar with it or do a quick discussion of leveling a little more detail.

>> This serves as a marker for players to know where they stand in the gaming experience over time. Sometimes, it is sort of a ramp were you on board people and you start with a novice or a new user and encourage them to fill things out, often features or abilities are unlocked as players progress to higher levels.

>> An example of this from the real world would be the eBay seller program. For those of you who use eBay a lot, they have teeters within their seller program, bronze, Silver, Gold, platinum, titanium, and it is based on your transaction accounts or the amount of money that you clear every year. Things are unlocked, it might be lower overhead on sales, better status with customers, preferred badging, a lot of the things are used and essentially in some ways eBay has game applied -- has gamified their sales process. Another example is American Express, think about their cards, green, gold, platinum, black, hotel rewards programs, airlines, all of these things have leveling. Also the idea the progress bar goes hand-in-hand with leveling and typically these are used to encourage new registrants to enter in additional personal information in this happens to be my progress bar for my link in profile and you can see I am done.

>> Actually progress bars getting to 100% are not necessarily a good thing. I am of the opinion that the best progress bars never actually reach 100%, you also want to keep your customer engage an attempt to have them do something more. So a quick essay question, without using metals or gems, imagine an interesting leveling system for your product. We have a few examples of American Express, or eBay, this is more just and essay question so in the chat, I personally would be curious to see what peoples ideas for leveling systems for their particular product might look like. We'll give you a couple of minutes here, we do not have tons of time, but you have a ton of different products and use cases. Sondra, maybe if things come in maybe you can read out a couple that might seem appropriate as answers to you.

>> We have one coming in, Prentice -- apprentice, journeyman, then master. Another response is military ranks.

>> Very much so.

>> Another response is beginning, intermediate, advanced.

>> Yeah. Definitely. Almost like a ski slope sort of thing.

>> Another one, color, stairs.

>> Sort of like the mountain analogy, reaching the top of the mountain.

>> Okay. There are novice, Lerner, adept, expert, and stage.

>> Stage -- sage, I like that. I would encourage you to use the words outside the norm and I like sage because it brings interesting visuals to mind. The idea is to make it fun. Rather than be advanced, intermediate, novice, it is good, but try to find words that somehow pertain to your product. Or things that are slightly out of the norm. And I think those resonate better with people than the more standard stuff.

>> He ways, we should probably move on but those are some great examples and I appreciate the feedback. So the next thing we're going to take a quick look at our leader boards. They serve to make simple comparisons and most leaderboard's nowadays are social. In other words they show where you stack up compared to friends in your network. So the image, this is Angry Birds and I admit I play it, this is the version they have on Facebook. You can see I have a couple of my friends and I came in second place. I am allowed to claim my prize which is some sort of virtual goods which will help me pop more pigs. It encourages a little competition in your social network. Another thing I can do, you can see that I have gotten second place you can say hey, would you like to post this on the wall? This week he took second place in your turn and this encourages other people to come in. It is kind of a sticky we of engaging people -- way of gauging people and you can see where you stack up compared to your social network.

>> It should be noted that this is a non-distinctive leaderboard. In other words, I don't know where I fit in with all the players in the world. There are something like 200 million. So coming in one millionth place does not resonate quite as well as second vice so you can slice leader boards. Locally, people within your local area, socially, people within your social network, or for the truly amazing players, maybe you want to slice it globally. So give it away to be sliced up and it will be different for different people. Allow that to have more impact. The other screen shot is from GovLoo -- GovLoop which is a social government focused on the government and you can see that I am an achiever there at the bottom and they are encouraging people to leave comments, post blogs, fill out profiles, a variety of activities which then adds your point total area

>> When your point total reaches a certain level, then you get a rank essentially. In this case I am an achiever. Or probably somebody who are much further along than I am, but there is that leaderboard component within a government style website is actually. In terms of other government activities, one that came to mind is the combined Federal campaign and I assume many of you are familiar with that. I know that within commerce anyway is there is some encouragement for certain divisions to get in front of others. There is on these privacy concerns there as well when it comes to leader boards and we can talk about that during Q&A if you're interested. But it is for the most part fairly nondescript and the idea is that you encourage giving through some friendly competition.

>> The last thing I want to talk about were badges or achievements. These are virtual or physical representations of essentially having accomplished something. Achievements can be easy, difficult, surprising, funny, and they can either be accomplished alone or in a group. It gives people a way to brag about what they have done and have a bit of a challenge. Achievements are often considered locked so another was you have to unlock an achievement and you go through a series of tasks. An example of badging systems, some of those enduring badging systems are the Boy Scouts. Merit badges, or maybe the military would be another example.

>> So the highlights they are, the balance -- badges balance delight with predictable achievement so it's okay to combine a little bit of surprise. Some of your badges should be almost random. You don't necessarily have to do anything predictable. Designed them for visual appeal and that is their important.

Leverage scarcity principles or in other words, not everyone should be able to get all of your badges. That is a good thing.

>> Sometimes I think that mistake is made in educational settings where you have the no Child left behind or whatever, but scarcity is important in badging systems. Ultimately it needs to integrate tightly with the larger product that you have. Those are the four things were badges I would like to call out great so a quick and random question on badges. Which of the following is not a badge on Forswear? -- Which of the following is not a badge on Forswear -- Forsquare a? Newbie, Binder,over achiever?

>> All right, we have our results coming in quickly. Some folks are still thinking.

>> [laughter]

>> This Western was not directly covered in the material. -- This question was not directly covered in the material.

>> Okay, it looks about like everybody is done. Well, we have one more coming in. Now I will go ahead and close out the polling. Five, four, three, two, and one. I am going to close it and here are the results. There you have it there it -- Eric.

>> I don't get to see the results for some reason so if you could read them out that would be great.

>> Okay, they said C.

>> You would think that what you? That does seem to be the answer but actually no, it is over achiever. So the award, kind of a trick question, yes, has some interesting history behind it. Again, his roles back to some badges -- this wools back to some badges being a delight, almost seemingly random. The award is popular. If you check in at certain locations, shall we say are tagged as being popular with a certain kind of clientele, you'll earn that badge. But you will not know why.

>> In fact, they did some studies that showed the people attempting to get this badge were going out, dining out quite a bit more than their counterparts in attempting to understand how this award was giving -- was given. That is an interesting way of looking at it. You know, it is kind of weird word and you're not sure if you want that badge, but that curiosity, and the conversation around it kind of fire early promoted that badge -- kind of viral he -- virally promoted that badge. Over achiever is not a badge that I am aware of, there is -- a site that lists all of the badges and there are hundreds of them but it is something to keep in mind.

>> So moving on and looking at the motivation. I want to talk a little bit about flow. I think part of the success of games and game mechanics is the idea called flow. Flow is sort of like being in the zone. You can see the flow channel on the diagram and it indicates players states, and between anxiety and boredom.

>> Is kind of the perfect motivational level. You have to give the player choice and the controls that will allow them to choose an appropriate level, but if you look at the vertical here, you will see that we have

challenges. So in other words, the complexity of the game, the amount of work that has to go in to increasing your level and on the bottom you see skill. The idea is you start out with simple challenges but not a lot of skill. If you make something too hard people get anxious and if you make it too easy there will get bored. But by maintaining the flow, you can actually have very good results when it comes to games.

>> If you think about this, this is actually a perfect model for education. You do not want students to get anxious because things are too difficult, you don't want to get bored because the results are just as bad, but if you combine this elusive flow, you can actually learn a lot. Another example might be learning to drive where you start out hopefully in a parking lot, and it is fairly easy and straightforward.

>> But then you slowly as skill increases, take it out onto the open road, and at some point you can learn to drive without being too bored and without having to much anxiety. For the very skilled drivers out there, they may seek extreme driving conditions or just drive for the fun on a Sunday afternoon drive which comes to mind. So an example of flow and that is the motivation if you will for game mechanics.

>> Another thing I want to talk about was different types of gamers. There is a gentleman called Bartel who developed a test for gamer psychology and it was a series of questions and you could actually take this online. If you do a search for Bartel test on Google it will pop up and as of last year at this test had been taken about 700,000 times. Bartel initial breakdown of you will identified four types of gamers. Why is this important? Because you want to know who your customers are. So different products will attract different types of people, and that in turn is engaged by different things.

>> So killers. These are people that really like to write peer-to-peer competition and they like leaderboard which we discussed before or ranks. Achievers are engaged by badges. Social lights, you know, this idea of socially engaging in games, certainly like social leaderboard is where things -- where they are competing with her friends. And explorers, these are the kind of people who would really get into the badge and that is sort of the random achievements, things that not everyone is going to see.

>> I should say that most people are social lights but everyone is a mix. And the more that you know about your players the better game you will design. If you haven't take -- if you have not taken the test, I would encourage you to take the test and find out who you are but also so you can work with your customers. The last hour to take a look at is reinforcement. I don't know how many of you have heard about the secure box that is a rat in a box with a lover. They push a little lever and they are given a food pellet and it turns out humans are not all that different.

>> We are looking at time versus the cumulative number of responses. On the vertical axis, this is user engagement, in other words, how may times is the rats going to push the lever? Were not necessarily talk about rats with levers but maybe some kind of motivational thing on your website. The creepy thing here is that they have to gone through and looked at different intervals. So take a look at a fixed interval. That provides ever wore diapers certainly for the time so you can see they're sort of this curve down and there is the taking where the food is delivered on the purple line in 30 minutes later or is another tick so that generates this number of sponsors are

>> Fixed interval has a very low engagement as compared to something like they like variable ratio. This provides an award after certain number of actions surrounded in a fixed time of say 30 minutes, say every 30 panel pushes the rat was the war did. You can see that variable compared to fixed, essentially, it is around 30 pushes but it is sometimes minus or plus and it is the same with the variable interval. But by introducing an element of randomness, that actually encourages user engagement to go up.

>> So do not overuses. As a little bit creepy but this is in the basis of a lot of different games in terms of how things are rewarded. So who was paying attention to all that talk about rats? What we ward schedule offers the highest total of engagement? Variable ratio, fixed ratio, variable interval, or fixed interval? Your questions now.

>> Thank you. All right, we have our questions out there and we have folks voting. It looks like we have got everybody so I'm want to close the polling question. I want to share their results. All right, we had 61% who chose the variable ratio. Followed by 31% who chose variable interval.

>> Very good. Well 61% of you are correct and the other portion of you certainly heard variable so variable ratio. Approximately every 30 steps plus or minus. This is essentially the user engagement action. Rewarding a player on that basis offers the most level of engagement. One other question for you, and this gets back for a different player types. Which player type focuses on direct peer-to-peer competition? Killers, achievers, social lights, or explorers?

>> We have got folks coming in now. All right, we have a couple more coming in. I will go ahead and close it. Here are the results. Eric, 74% came in with the answer killers. And there was a tie at 11% to 20 achievers and social lights.

>> The correct answer is killers. This is a loaded term. This is not necessarily bad people. Killers are players who are motivated with player to player interaction. Many competitive sports fallen to this category. A classic example would be the Olympics were most of the competition is peer-to-peer. But that type of player is especially engaged with interactions with other players rather than interactions with the environment on the game itself.

>> That also plays a little bit into the socializing or social lights component but that type of player, the killer, definitely likes peer-to-peer or it I would encourage people to take a Bartel test again to see where they fall. Everyone is a little bit of everything so you might have an 80% killer or a 50% social or 10% explorer and yes I know does not equal up to 100%. When the test is laid out actually the total is going to be 200% and before you ask I have no idea why they did it that way. But I'm sure there is somewhere out there on the web where you can find out.

>> Overseeing en suite examples from the industry and government. One example I thought was very interesting for the runners and the government -- for the runners in the office is Nike plus. Their goal was to generate brand loyalty and alternately sell more sporting equipment. However, you do not get points for buying Nike products, that would be a little bit in-your-face and kind of backfire. Instead, it sought to make running more fun and by doing so you have more converts to join the running community and by having a bigger community you share or have more products selling. So they were

very smart on figure out their gaming system as well as a wording points. The core application is a handy tool. You can track your time, distance, and if you have an iPhone or a smartphone, it is GPS compatible, it will log on, it will give you stats on your run, but the game mechanics they have managed to make running social.

>> You can see the starting screen right there, welcome to Nike plus. A player is immediately on board at it is called. They are given a first task and in this case it is start new run and the players are encouraged to post information on their runs on Facebook. What is interesting is when a friend like that post it actually communicates back to the application and it will cheer you on during your run. If I post to my Facebook wall I have started a run, as I have gotten into it if someone in my social network likes my wall and I am still running it will actually offer encouragement both through famous people, Lance Armstrong will give you words of encouragement, as well as a crowd cheering to let folks know what is going on.

>> Some of the advanced features include the game of Tag so you can challenge friends to a race and if you lose, you are essentially it. Other players can trash talk you so on your wall, essentially we will collect words of encouragement since I'm sure of one gets along, but they are allowed to leave comments and you are essentially "it" until you meet someone else and pass the baton of sorts.

>> Finally there are also some user created challenges to go along with Nike's challenges to their really is always something new and exciting for people to do when it comes to running. I should also mention that Wii Fit has similar mechanics and goals and I use a little bit more than Nike plus but I thought it was an interesting example to pull out of the game if I system and its advantages.

>> A quick question, and this one was not in the literature, but according to the CDC more than point percent of Americans are overweight. 15%, 50%, 66%, or 80%?

>> Are we collecting responses?

>> Yes we sure are.

>> I was making sure, you were so quiet.

>> We have quite a few coming in right now. Although I. -- All right, it looks like we have gotten everybody's vote so I will go ahead and close it out and show the results. Okay, Eric, it looks like we have 55% who selected 66%. While second place with 28% for option a 50%. And the last response was 17% of 80% of Americans being overweight.

>> Good guesses. A lot of you seem to know America pretty well and the answer is 66% of Americans are considered overweight. This plays in a little bit later as we begin to discuss the White House initiative and gamification and health is actually really important for a variety of reasons, but mostly for healthcare reasons. If we can get that number down through things like Nike plus or other initiatives, one is potentially well-suited to gamification.

>> Another example I want to show is called Full It -- Fold-It and hoping some of you are familiar with this and it comes from the University of Washington and rather than talking about it more there are

three major articles that talk about this. I thought I would show a screen capture of the game and this is an ingenious offering. This is a protein, it turns out gamers to know little bit -- you know very little about chemistry, this is better than some of our best computer models. So they throw up these puzzles there is something about the geospatial recognition capabilities of gamers that have allowed the model results for this game to surpass the best computer models.

>> In October of last year it was announced that they had unlocked the shape of an AIDS-related protein which had baffled scientists and experts for more than a decade. So the key take away message here is the best players had no background in chemistry but that did not stop them from solving the challenge and less than three weeks. So it turns out there is something unique, and currently really not understood, about a player's spatial recognition intuition.

>> I think I have a little bit of the video of gameplay to let you see what looks like. It only runs a few seconds here, but that will give you an idea. It is very much like a puzzle game. There are certain types of players which will benefit from this type of thing. This may not be a killer type of game, there is not a lot of peer-to-peer combat, the four explorers, this would certainly be potentially very good. Or achievers, there are badges in the game so you can see that you have essentially reshaped this protein and the score has gone up. There is a leaderboard here.

>> I have to stress that real science is actually happening and there are three major articles in the last year, including some very interesting results in AIDS research. This is spawned a whole new series of additional applications and it is than partially funded by DARPA and it will be interesting to see what kind of scientific challenges are next on the chopping block when it comes to this.

>> The last example I wanted to look at is actually one from NOAA an peg seven -- and Peg Steffen has teamed up with a 3-D game lab at Boise State looking at Planet Stewards. This is to diversify the high school curriculum experience and this is where the digital media and learning competition so there was a grant proposal that went out. Essentially using the NOAA content, the folks at toys he and the game based platform are creating a whole system of badges, or quests. In other words, these are the achievements or steps you have to go through in order to unlock the badges, you will be learning experience points, levels, and essentially try to learn about the climate, coastal and Ocean sciences, and so on.

>> Folks are interested in learning more about this, I would be happy to you in touch with those who are putting this together. The team from NOAA will essentially join with designers from Boise to flush out different experiences and there are about 15 different careers and each one of those and there are about 15 different badges so it is a pretty huge project. The idea is to start dilating this next year with educators and in high school classrooms. So yeah, sort of a new way to gamify the educational experts as it pertains to earth science.

>> So focusing in on gamification and government, NOAA is certainly not the only one involved when it comes to games and government. In fact, this last year we had some leadership from the White House office of science and technology policy, and the ladies name is constant -- Constance Steinkuehler and

the federal games Guild started in November of 2011 and there were about 70 people in attendance on that first meeting. Some great quotes to begin with your

>> This is Barack Obama. I am calling for investments in educational software that's as compelling as the best videogame. I want you guys to be stuck on a video game that's teaching you something other than just blowing something up. I love that quote and it was made last year in Boston by president Obama himself. The gist here is that there has been an edutainment industry where they put a point in front of the sun and that has not succeeded well. Fun has to be the primary characteristic when it comes to these systems and the challenge is finding something fun that is still worthwhile with the message and that is the challenge that the president is giving here.

>> Not to be left behind, Michelle, I can attest to Dantz, Dantz, Revolution. We got it at Camp David and it will make you sweat. And it is addictive and a very good way. The president still cannot do it. She is obviously very interested in health topics, and she is currently at the Olympics. So there is some high-level support for these kinds of activities.

>> I should also say that if you want to build a game of five system -- game of hide system -- game of hide -- gamified systems it helps to try them out. -- It is always a good idea to see what is out there and what works and know what you enjoy before you try to gamify your own products. If nothing else, your kids will love it. The Obama's are certainly game players themselves. That is not to be forgotten.

>> Just some quick research on games and some background in terms of what is going on. It improves visual acuity and attention, it aids in systems understanding and history and geography, scientific reasoning, helps with scientific discovery where it adds to science value, it can certainly aid in literacy and we have identified some help type of issues, and finally, it can decrease stress and depression. This can. Tremendous -- this can be tremendous things if we learn how to do them correctly.

>> As I mentioned, last November 70 people attended and 23 agencies that we have established a website for the group. If you're interested in learning more or joining please feel free to send me an e-mail and we will get that up and distributed at some point. I would be happy to get you involved. And yes, I forgot to mention the current count at this point since November, we have gone from about 133 to 186 so it is certainly an industry group -- an interesting group.

>> Finally, what videogame was Obama checking out in the store? Was it call of duty, super Mario kart, just dance, or Pac-Man?

>> We will launch its and watch the boat come in. -- We will launch it and watch the vote come in. A lot of people seem to know this answer. This is one that my daughter watches a lot. All right, I will close it out. I will show the responses to everyone. All right area it, drumroll, it is Just Dantz.

>> Excellent choice.

>> Yes, 85%.

>> The answer is in fact Just Dance in the link is there from the Wikipedia article. It has been around for quite some time and in fact has spawned a whole variety of just dance versions. The competitor to that is Dance, Dance Revolution and it is definitely a game that will get your blood flowing. Here are additional resources and there is a great book by over I we -- a great book by a rightly -- O'Reilly called Gamification by Design. And then there is the website adds GamificationU and for those of you with a little extra time there is a free online course on gamification and there is the website. So thank you so much for listening. Hopefully we have a few minutes your left for questions. I appreciate you letting me talk.

>> Yes we do and thank you so much Eric. I will turn this over to Lisa.

>> I heard there were a couple of games from NASA. One is Moon base Alpha and one that they recently put on Facebook to test your knowledge. Do you have any knowledge of this game?

>> Yes in passing, Moon base Alpha and the Nam -- and the man same as Daniel, they are in the middle of an update of it. It is available through STEAM which is a digital distribution network for games and if you do it Google network search it will pop right up. It is a free download and it will download right to your machine. Then Based A was developed for external partnerships through Virtual Here is and it was an approved concept in a lot of ways. The idea was to get people interested in space, attention at careers in space, so it was done around a Moon Base. An asteroid hits and you have limited resources and time to get this fixed before you run out of oxygen.

>> Theoretically this is a precursor to a larger multiplayer online experience where there might be a whole world set up along with a mission to Mars. That remains to be seen, but NASA is certainly the forefront of developing actual game content which is slightly different in game if I'd systems -- slightly different and gamified systems and they had a great partnership with Angry Birds actually. There was a lecture on microgravity with the international space Museum and the actually have the NASA logo, or meatball as a people like to call it, within the game along with an icon for the international space Station.

>> I cannot remember the number of clicks, but that number was reported last week and it was in the several millions. So the amount of traffic coming to NASA and the NASA website from these commercial games is astronomical, no pun intended. So yeah. The one on Facebook I'm not entirely sure. If you happen to know the name I might be able to say more but those are a couple of the NASA initiatives.

>> Speaking of NASA, I'm not sure if this is related, but some ask the question do you know about NASA's sector 33 question?

>> NASA's sector 33? Well, I know what I am going to Google when I get off the phone but unfortunately I don't have anything intellectual to say about it so my apologies in advance. Wasn't that a Star Trek term? Well nevermind.

>> What about alternate reality? I see amazing games using that and I think we could use that.

>> Augmented reality is where you could overlay information onto a scene. Hopefully a lot of you are familiar with its and typically it is done with a smart phone where you can hold it up, capture real-time video, process that video and include additional information, and then see things that are not really there. So in games, this is sometimes used for real-life space invaders.

>> Walking down all, you can see little aliens pop up and you can shoot at them through your phone, it is stuff that is not really there, but there is sort of a blending of realities. And education it is used a lot. I've seen it began to be used in textbooks or you can literally have things pop out of the page. It is a great way of showing 3-D models for example, or information that does not compress nicely into a page format your so there is some huge potential. Yeah, there is a whole section in gaming call alternate reality gaming where you might have a scavenger hunt taking place in the real world that has component tied back into an application or website.

>> So it encourages people to get out and away from their computers. So these systems don't necessarily mean sitting down in front of a box all the time. Nike plus being a classic example right? It is about running. So augmented reality has some interesting potential when it comes to those sorts of applications.

>> All right. There are a couple of more questions. Any low-cost suggested sources for visually appealing badges question

>> Let me see if I can understand this correctly, are there any low-cost sources for visually appealing badges?

>> Correct.

>> Well, you could certainly look through clipart Galleries, but honestly I would recommend trying to design your own. That GamificationU website I mentioned earlier they have templates on there for badge design and I'm not necessarily talking ongoing out and hiring a professional designer. You know, a lot of the folks engage with different student communities.

>> So a lot of the game development occurs sometimes in partnership with a local university, so grab a couple of art student. I think he actual format and layout comes after you have developed a solid plan for what the badges are. You can sketch out some ideas. There are a lot of different websites out there such as BadgeBuild.com where you can get in and take a look but other than checking out the part galleries and stuff, especially since the badges are meant to be engaging as a product, it is difficult to find things that are sort of ready made. I don't know if that is a good answer to your question, but, you know, leverage cheap labor where you can and try to come up with some of your own ideas.

>> Okay. I have time for one more question. I do have to of them that are similar. There was a lot of talk about Second Life a while back. -- And in your opinion does the government have a place with this question

>> I will say that I have quite a history with Second Life and some of the people on the phone may be aware that NOAA was an agency that had a very early present in Second Life -- we maintain an island

within the environment. For those of you who do not know, Second Life is a game like environment, a 3-D virtual world, where you create an avatar, and you can login, and it is all user generated content. We developed an island that was a cross between Disney World and science education.

>> You take a submarine under the water were a big tsunami wave comes in and it affects town or there is a hurricane hunter where you can fly through a hurricane. It is a great system. Second Life itself has some technical challenges, the adoption was not necessarily something we are expecting early on. For the most part, our program here at NOAA has moved onto different technologies but that is probably a whole separate talk. The short answer is yes, I think government does have a place in environments like Second Life, maybe not Second Life per se but are cool world technologies and game technologies as a whole, I certainly think we have a place in. It is a question of finding cost-effective ways to do that, and to try to learn from each others' mistakes, and in some ways that is the goal of this federal games dealed -- guild which is to share best practices, see what the experts and those resources are, and from that, move forward and make the best decision. Hopefully that answers the question.

>> Area, -- Eric, if you could, though back to the last slide that shows the resources and the link.

>> This one right here question --?

>> Yes, that is the one. We want to thank you so much for coming today and I will turn it over to Lisa.

>> Thank you everyone. I hope you all enjoy this and thank you Eric. Have a good afternoon.

>> [Event Concluded]