***jTeam Agreement***

**EC463/EC464 - Senior Design**

**Fall 2016 – Spring 2017**

We, the members of team number **24**, called **Trivio**, have entered into a project titled **Trivia Throw Toy (3T)** for the customer, **Eugene Kolodenker** as part of Senior Design Project, ENG EC463/EC464.

The general objective of our project is:

To create a ball shaped toy that plays a fact when it is thrown or shaken. The ball should download facts from a server, which enables the toy to play facts regardless of whether it is connected to the internet. The toy is an educational ball that targets children of ages 7 and up.

We expect that our major project deliverables will include the following:

* A ball shaped toy that plays a fact when thrown or shaken
* An android and iOS app that allows the user to change features such as categories, volume and connect to wifi.
* A server and database hosted on Amazon Web Services that fetches the facts from wikipedia, categorizes them and allows the toy to download them.
* A NLP algorithm which is able to separate general text from trivia.

GENERAL CRITERIA FOR SUCCESS

We understand that evaluation of our work in Senior Design will depend on several factors. First is our team's success at meeting our proposed objectives, as described by our specifications, and providing our deliverables in working fashion, with the required documentation, by the course deadlines. Second is our demonstration of individual proficiency at design and at keeping adequate engineering records of our work. Third is our individual and collective team skill in listening, helping others to reach their goals, and negotiating technical and team problems. Finally, we understand the department policy for reimbursement of expenditures made in executing our project and agree that anything spent about the amount reimbursed by the department will be equally shared among all team members.

INDIVIDUAL LEADERSHIP

We understand that Senior Design teams shall be organized to give each member clear responsibility for one or more design areas. Several people may collaborate on a problem, but only one person should be the designated 'leader' for a design area. Each of us should be the leader of at least one design area so that we can clearly demonstrate our individual proficiency in design and in keeping professional engineering records (in our logbooks).

RESOLVING TEAM CONFLICTS

We understand that we need to work to resolve interpersonal and technical disputes within our team, in a professional and respectful manner. This will sometimes involve compromise, and we agree to be open to reasoned technical arguments about our individual areas and the team's collective efforts. We will seek faculty or mentor help when problems appear serious and are not resolved quickly by our efforts.

NON-PERFORMANCE OF DUTIES BY A TEAM MEMBER

We understand that each of us must pursue our design and team tasks in a professional and timely fashion to ensure our team's success. Should a team member fail to show diligence and concern for the team, a meeting of the team and the course faculty will be held to assess the situation and recommend specific short-term performance goals for the team member, and possibly the whole team. If these goals are not met, the course faculty may decide to remove the offending team member from the team. The student will then have to complete the course reporting directly to the faculty as a team of one. This is a serious step and suggests a significant failure on the part of the individual, and possibly the whole team. It should not be considered except as a last resort.

QUESTIONS

We understand that students and teams are welcome to approach the course faculty about this agreement at any time.

INDIVIDUAL TEAM MEMBER RESPONSIBILITIES

The remaining pages list our team members and our individual 'leader' responsibilities.

TEAM MEMBER ADDENDUM (submit one for each team member):

Team Member Name: **URVASHI MOHNANI**

Team Number: **24** Team Name: **Trivia Throw Toy (3T)**

I have read this entire document, including my teammates’ descriptions of their 'leader' roles. I understand the document and agree with the descriptions of roles.

Team Member Signature

Date: 11/29/2016

The following paragraph(s) describes the technical problem(s) for which I hold leader responsibility.

1. I am responsible for parsing the fact from text to speech and researching a speaker that provides best quality along with battery efficiency.
2. I will work on the PCB design for our toy with Charles that will allows the toy to have necessary modules such as wifi, accelerometer, and text-to-speech on one small board.
3. I will work on the Natural Language Processing algorithm as well, which extracts fun facts from a given text.

TEAM MEMBER ADDENDUM (submit one for each team member):

Team Member Name: **NEIL SANGHRAJKA**

Team Number: **24** Team Name: **Trivia Throw Toy (3T)**

I have read this entire document, including my teammates’ descriptions of their 'leader' roles. I understand the document and agree with the descriptions of roles.

Team Member Signature

Date: 11/29/16

The following paragraphs describes the technical problems for which I hold leader responsibility.

1. Set up database and server hosted remotely on Amazon Web Services(AWS). The database will contain the list of trivia facts.
2. Writing server code to add facts to the database. The server code exposes an API which allows the microprocessor to retrieve facts by making HTTP GET requests.
3. Work on Natural Language Processing algorithm along with other team members which extracts trivia from a text.

TEAM MEMBER ADDENDUM (submit one for each team member):

Team Member Name: **Jacob Dansey**

Team Number **24** Team Name: **Trivia Throw Toy**

I have read this entire document, including my teammates’ descriptions of their 'leader' roles. I understand the document and agree with the descriptions of roles.

Team Member Signature

Date: 11/30/16

The following paragraph(s) describes the technical problem(s) for which I hold leader responsibility. (Please give technical details if possible. Broad topical claims will be difficult to assess.)

I am the iOS mobile application lead and WiFi client lead. My role is to develop an iOS mobile application that connects with the server as well as the Trivia Throw Toy. This mobile application should manage the WiFi as well as determine the category of the fact to be spoken. I am also in charge of connecting the microprocessor to the server. This requires connecting to a WiFi module and writing functions to pull the proper facts from the server and cache them in the right location. I will also be assisting on the NLP algorithm as well as with parsing random Wikipedia pages for fun facts.

TEAM MEMBER ADDENDUM (submit one for each team member):

Team Member Name: **Christine Low**

Team Number: **24**  Team Name: **Trivia Throw Toy (3T)**

I have read this entire document, including my teammates’ descriptions of their 'leader' roles. I understand the document and agree with the descriptions of roles.

Team Member Signature

Date: 11/29/2016

The following paragraph(s) describes the technical problem(s) for which I hold leader responsibility. (Please give technical details if possible. Broad topical claims will be difficult to assess.)

1. I am the Android application developer lead and will create an app that will allow the phone to enter the wifi credentials for the Trivia Throw Toy to connect to. It will also allow the user to customize the toy, such as picking categories, and viewing the fact history list.
2. I am responsible for implementing caching the facts from the server to the Trivia Throw Toy’s memory for offline use.
3. I am responsible for implementing the throw/shake detection in order to state a fact.
4. I am responsible for creating the graphical user interface resources and mock ups so the IOS and Android apps will be consistent in design.
5. I am responsible for designing the Trivia Throw Toy’s 3D model in Solidworks in order to 3D print a mock up.
6. I will also assist in the NLP for parsing facts from Wikipedia.

TEAM MEMBER ADDENDUM (submit one for each team member):

Team Member Name: **Changshuo Fu**

Team Number **24** Team Name: **Trivia Throw Toy (3T)**

I have read this entire document, including my teammates’ descriptions of their 'leader' roles. I understand the document and agree with the descriptions of roles.

Team Member Signature

Date: 11/29/2016

The following paragraph(s) describes the technical problem(s) for which I hold leader responsibility. (Please give technical details if possible. Broad topical claims will be difficult to assess.)

1. I am responsible for battery design for the project so that the whole system can work functionally. (The battery life must last at least 3 hours and support charging from standard 120V and 60Hz AC power output. )
2. I will work on the wireless charge on the battery if possible.
3. I will work on the PCB design for our toy with Urvashi that will allows the toy to have necessary modules such as wifi, accelerometer, and text-to-speech on one small board.
4. I am responsible for finding the material that will be used on our project. (The material should be able to protect the entire system and prevent it from damaging)

TEAM MEMBER ADDENDUM (submit one for each team member):

Team Member Name: (printed)

Team Number \_\_\_\_\_\_ Team Name:

I have read this entire document, including my teammates’ descriptions of their 'leader' roles. I understand the document and agree with the descriptions of roles.

Team Member Signature

Date:

The following paragraph(s) describes the technical problem(s) for which I hold leader responsibility. (Please give technical details if possible. Broad topical claims will be difficult to assess.)