

Fall 2025 Construction Project: Card Shuffler & Dispenser

Project Overview

The “Card Shuffler & Dispenser” construction project focuses on designing and manufacturing a system. The project should be appealing and eye-catching to students passing by during tabling or attending recruitment events. The **deadline for this project is Friday, November 8th**. It is intended to focus on everyone’s major and skill sets to foster collaboration throughout construction. The dispenser must be portable and aesthetically pleasing in a way to advertise DUEN, while also being simple enough to maintain throughout its lifespan. **The budget will remain at \$500.**

Requirements

- The “Card Shuffler & Dispenser” should account for a variable amount of players and cards.
- The device should work with different cards and sizes.
- The system must be intuitive and easy to use and debug.
- The project should be portable, battery-powered, and fit in a backpack.
- The dispenser should be stable and sturdy.
- Cards should be shuffled and dispensed in 30 seconds.
- An interface that controls variables (number of players, number of cards, etc.).

Aesthetics

- The project should have an appealing design that incorporates the DUEN colors and logo.
- The project should have a catchy name.

Below is a list of officers that have offered some tools and supplies. We recommend utilizing your own resources, as well as equipment from the ESDC, before contacting these officers (**Note: officers must be contacted in advance if their tools or supplies are needed**).

- Seshnag Regoti: Miscellaneous supplies (ex: LED strips, walnut boards, waterproofing sprays, etc.)

- Jonathan Wu: Soldering Kit & Electronic Parts (jumper cables, sensors, Arduino, and breadboards)
- Ian Marwong: 3D printing/programming/electrical/soldering help, Tools (wrench/hex key/screwdriver)
- Bryan Nguyen: Solidworks help.

* Officer contact information is listed within your [Internship Manual](#)