Coding Exercise

## Requirements

Please fulfill the following requirements while taking into account the evaluation criteria and technology requirements in the following sections.

1. Must provide a standard deck of 52 playing cards, with 4 suits.
2. Must be able to sort the deck in ascending order.
   1. You are free to determine what the term “ascending order” means for a deck of cards, but be ready to discuss your choice during the interview.
3. Must be able to randomly shuffle the deck of cards.
4. Must have automated test coverage.
   1. You are free to determine the approach and structure of your automated tests.
   2. All of your automated tests should pass.

## Evaluation Criteria

ShiftWise values clean code that is readable and ready for review. Tests should provide customer ready confidence in your code. While developing your solution, please feel free to use whatever resources you find helpful in your day-to-day work (Google, Stack Overflow, etc.), but be ready to explain *and modify* your code during the in-person interview.

## Technology requirements

Complete the exercises using any of the following languages and runtime environments:

* C# 4/5/6
  + .NET 4.5 through 4.7, including Core
  + The NUnit test framework is preferred
* JavaScript 5/6
  + Chrome/Firefox or Node.js (specify version in submission)
  + The Jasmine unit test framework is preferred

Please use one of the following IDEs or provide scripts to build and execute your application and tests. Keep in mind that only these IDEs will available during the in-person coding challenge.

* Visual Studio 2015/2017
* Visual Studio Code
* Atom
* JetBrains Rider
* Sublime Text 3

We must be able to run your code and your tests. To that end:

* Do not reference any code or libraries that require a paid license or subscription.
* Do not use any frameworks or libraries that aren't available for use by the general public.
* Do not use code or libraries that are protected by copyright, intellectual property rights, or any other restriction that prevents free sharing and use of the code or libraries.
* If we need any 3rd party libraries/packages, please include the package management script or manifest (ie. package.json, packages.config).
* Do not assume any 3rd party packages or libraries are installed globally.
* If we need to install any IDE extensions or other software to run your tests, please include instructions on how to install them.
* All work will be evaluated on a computer running Windows 7/10 or Ubuntu Xenial.

## Submission guidelines

When you're done, please push your code sample to GitHub and send an email with a link and your full name to the following email address: code\_samples@shiftwise.com

We look forward to seeing your work.