

# Final Project Technical Implementation Plan

## Group Members

Xinyu Chen, Yanzhe Wu, Yong Que, Zheng Li

## Project Description

**RentSIT** is a rental platform for Stevens students. This site allows property owners to post properties near Stevens for SIT students. Students can quickly browse all the properties and contact the owners.

- **Core features**
  - Users can browse all the properties
  - Users can quickly filter properties
  - A dashboard for users to manage their Watchlist
  - A dashboard for owners to manage their properties.
  - Property profile
    - Title
    - Description
    - Type
    - Price
    - Date
    - Album
  - User profile
    - Name
    - Avatar
  - A login/signup system
  - Owners can add new properties
  - Owners can manage their listed properties

## Course Technologies

- **Nextjs**
  - Next.js is a server-side rendering React framework. We will use nextjs to support server side rendering. This is good for SEO and load time of the webpage.
- **React**
  - We will use React as our single-page web application framework. We will create components for the elements that we include on our pages.

- **Redis**
  - Redis will be used to cache data and html to improve user experience. We will use it to cache the most recent viewed properties.

## **Independent Technologies**

- **ImageMagick**
  - ImageMagick is a library that is used for manipulating images. We will use ImageMagick to edit the profile images and property photos that they upload to the site.
- **Lightbox2**
  - Lightbox is a simple script used to overlay images on top of the current page. It's a snap to setup and works on all modern browsers. We use lightbox2 to show the property's photos.
- **Express-rate-limit**
  - Express-rate-limit is a basic rate-limiting middleware for Express. We use it to limit repeated requests to public APIs and/or endpoints such as password reset. We use express-rate-limit to prevent the brute force attack.

## **Github Repo**

[https://github.com/Hughli3/CS554\\_Fincal\\_Project](https://github.com/Hughli3/CS554_Fincal_Project)