**INTERDRUGS SEMANTIC WEB APPLICATION**

**SYSTEM DESIGN REPORT**

# INTRODUCTION

## Purpose and Scope

Multiple diseases may happen to a single person. To provide holistic medical treatment, healthcare provider always need to prescribe a list of drugs, targeting at different diseases at the same time. However, if any one of the drugs interacted with another, the prescription might bring a negative result that neither doctors nor patients want to see. Meanwhile, it is often heavy brain burden to memorize relationships among diseases, drugs, and interacting drugs. A slip in the doctor’s mind could cause serious medical accidents.

To help fill this gap, we developed a semantic web application named “InterDrugs”. The InterDrugs system does not entirely replace doctors mentally, but play a supporting role in the healthcare providers’ decision making.

## Project Executive Summary

With a user’s input of disease names, the system retrieves in the ontology we built, which combines third-party data source, and outputs drugs possible to cure these diseases, as well as highlights interacting drugs.

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