

An API For Microsimulation Models

Graham Stark
Social Work and Social Policy
University of Northumbria
Newcastle, UK
graham.stark@northumbria.ac.uk

Abstract—This note describes a simple general Application Programming Interface (API) for controlling microsimulation models.

Index Terms—Microsimulation, APIs

I. INTRODUCTION

This note describes

II. PURPOSE

There have been online, publicly available versions of large Microsimulation models since the mid-1990s; the Institute for Fiscal Studies' Be Your Own Chancellor (1995) and Virtual Economy (1999) were early examples. Contemporary examples include the ADRS suite of South African simulations, TriplePC and the University of Essex's UK Mod.

All these models are implemented very differently. ...

Our experience of building such models suggests to us that there would be advantages in having a standardised method of interacting..

Based on our experience since then ...

III. CHARACTERISTICS OF MICROSIMULATION MODELS

Long running

Very different implementations

Phases (queues, running)

Different inputs and outputs

IV. FEATURES

Out of scope: security

Learn about exact formats of inputs/outputs

Hacky session management: CORS shit append session_id

on each response

Low marginal cost of adding a model (view) to a server

Typically front-ended by Apache/NGNX

Formats: JSON - optionally Markdown/XML/CSV

V. THE API

A.

B. *Problems*

TABLE I: OTHERS

Benefit	Code Module	Notes
Minimum Wages	<code>HouseholdAdjuster.il</code>	

REFERENCES