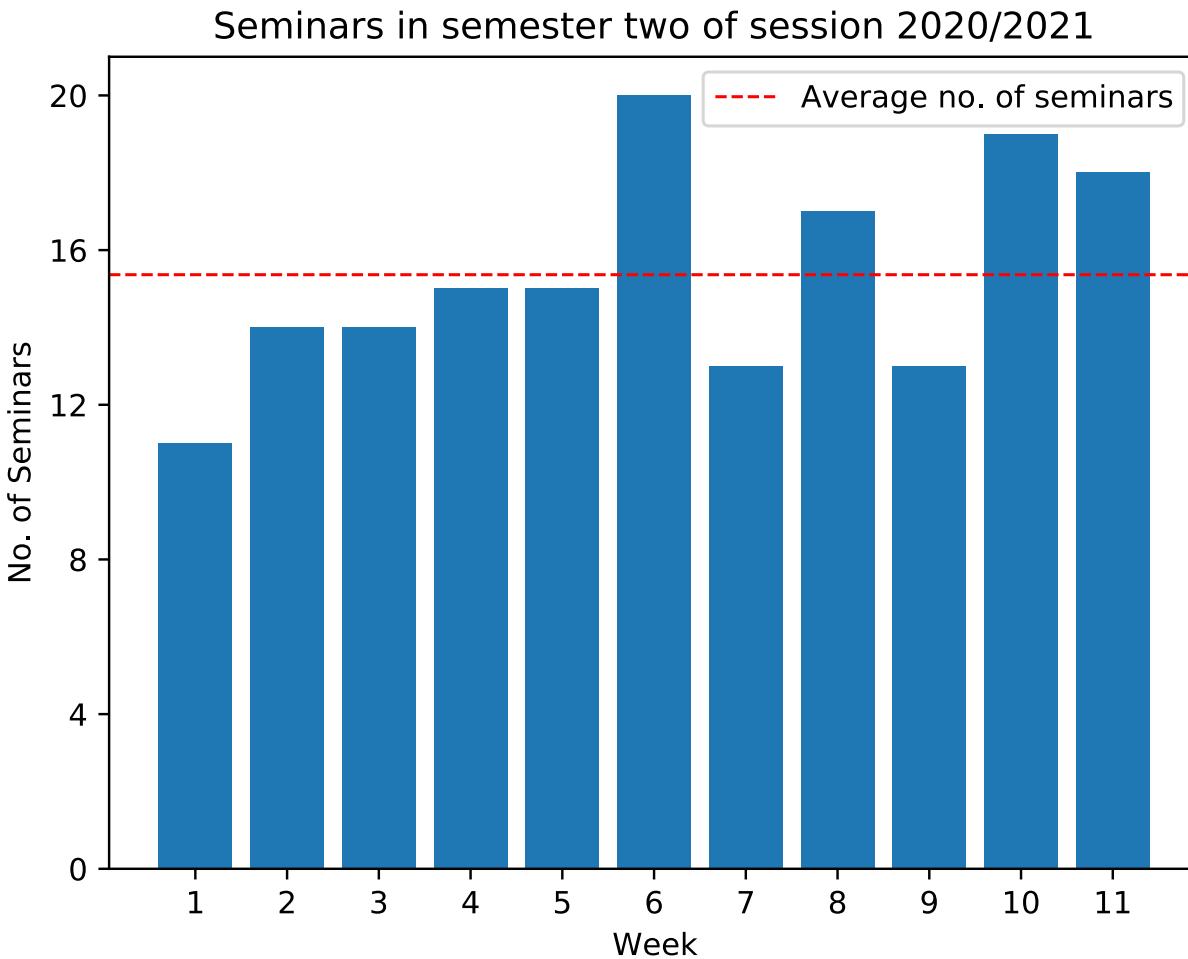


# Seminar Roulette

Level 4 Project Presentation

Ollie Gardner | 2310049G

# Motivation



Background



NETFLIX



amazon

# Background

Events    Marked events    Subscribed events    Browse    Recent updates    Search for events    Search

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Talks this week until Tuesday 2 Mar | All upcoming events | Recently updated events

VIRTUAL SEMINAR SERIES -- INTEGRABLE SYSTEMS: From Kajihara's transformation formula to deformed Macdonald-Ruijsenaars and Noumi-Sano operators

Martin Hallnäs, Chalmers University of Technology

13:30-14:30 on Wednesday 24 February 2021

Google | CalDAV | Email | Web

Integrable Systems and Mathematical Physics Seminar

Hide details | Shareable URL.

In this talk, I will explain how suitable specialisations of Kajihara's transformation formula leads to particular generalisations of (trigonometric) difference operators of Macdonald-Ruijsenaars as well as Noumi-Sano type. The transformation formula in question is a far-reaching generalisation of the Euler transformation formula for basic hypergeometric series, whereas the difference operators include the deformed Macdonald-Ruijsenaars operator studied by Sergeev and Veselov. I will sketch a few applications, including a new proof of the integrability of Sergeev and Veselov's deformed Macdonald-Ruijsenaars operator, and, time permitting, indicate some corresponding results at the elliptic level. The talk is based on ongoing joint work with Edwin Langmann, Masatoshi Noumi and Hjalmar Rosengren.

For more information, and how to access the seminar through Zoom, see the webpage of the events [here](#).

Location: Zoom seminar hosted by ICMS

[View group](#)    [Subscribe](#)    [Mark event](#)

SICSA Education Workshop - Exploring the SQA NextGen project and the impact on student transitions

SICSA Event, SICSA

14:00-16:00 on Wednesday 24 February 2021

Google | CalDAV | Email | Web

Scottish Informatics and Computer Science Alliance (SICSA)

Show details | Shareable URL.

FATA Coffee

Various

15:00-15:30 on Wednesday 24 February 2021

Google | CalDAV | Email | Web

University of Glasgow

→ STUDY    → RESEARCH    → EXPLORE    → CONNECT

Search    go

Home / Schools / School of Mathematics & Statistics / ... / Seminars

## SCHOOL OF MATHEMATICS & STATISTICS

[Events](#)

- Seminars
- Conferences & Workshops
- Archive
- iCalendar feeds
- Masterclasses

[SEMINARS AND COLLOQUIA](#)

**Seminars**

- Algebra and Number Theory Seminar
- Analysis Seminar
- Applied Mathematics
- Continuum Mechanics Seminar
- Geometry and Topology Seminar
- Integrable Systems and Mathematical Physics Seminar
- Mathematical Biology Seminar
- Postgraduate Seminar
- SoftMech
- Statistics Seminar

**Colloquia**

- Distinguished Lecture Series

iCalendar URL:  
TBC  
How to use our iCalendar feeds

# Background

eventbrite

Filters

Only show events from organisers I follow Off

Date

Price

Category

Format

Language

Currency

Q university of glasgow

Glasgow

Search

Stay connected: Browse our online and virtual events  
Let's go >

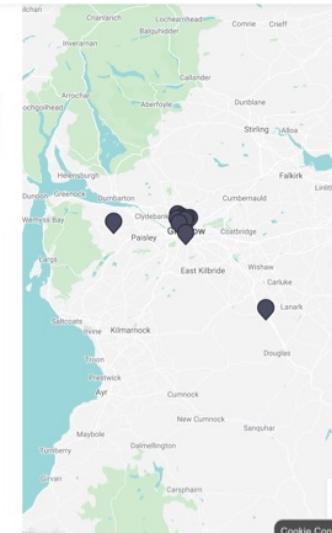
Tue, Mar 2, 14:00 • 53 more events  
University of Glasgow Tours  
University of Glasgow • Glasgow

Thu, Jun 3, 18:00 • Free  
SAE Glasgow Open Event  
SAE Institute Glasgow • Glasgow

Sat, Feb 20, 09:00  
Accelerator - Combined Basic Botulinum Toxin and Dermal Fillers  
Bridge of Weir Dental & Aesthetics • Glasgow  
Starts at £1,198.40

Fri, Mar 12, 18:00  
STAR BALL 2021  
Glasgow University Union • Glasgow

Sat, Mar 27, 10:00



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**talks.cam**

Log in

Cambridge users (haven't)

Other users

No account?

Information on

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Finding a talk

Adding a talk

Disseminating talks

Help and Documentation

COOKIES: This site uses Google Analytics Cookies for performance monitoring. By using this website you agree that we can place these cookies on your device. [More](#)

Search for a talk, series, speaker or venue

e.g. Surfaces and strings, Darwin lectures, Thomas Young, meerkat, Lord Adonis

Search

Browse the A-Z index

**Message of the day**

**Coronavirus update:**

The events on Talks.Cam are user-generated and as such are not under University control. Please exercise sensible measures if attending any events, and ideally do not attend if not necessary. Many events will switch to online alternatives so please check the event details before making a journey. University guidance on the Coronavirus is available at <https://www.cam.ac.uk/coronavirus>

All of Today's Talks | Browse by Date | Recently Added

**Featured lists**

Early Modern British and Irish History Seminar  
Indo-European Seminar  
Andrew Chamblin Memorial Lectures

**Featured talks**

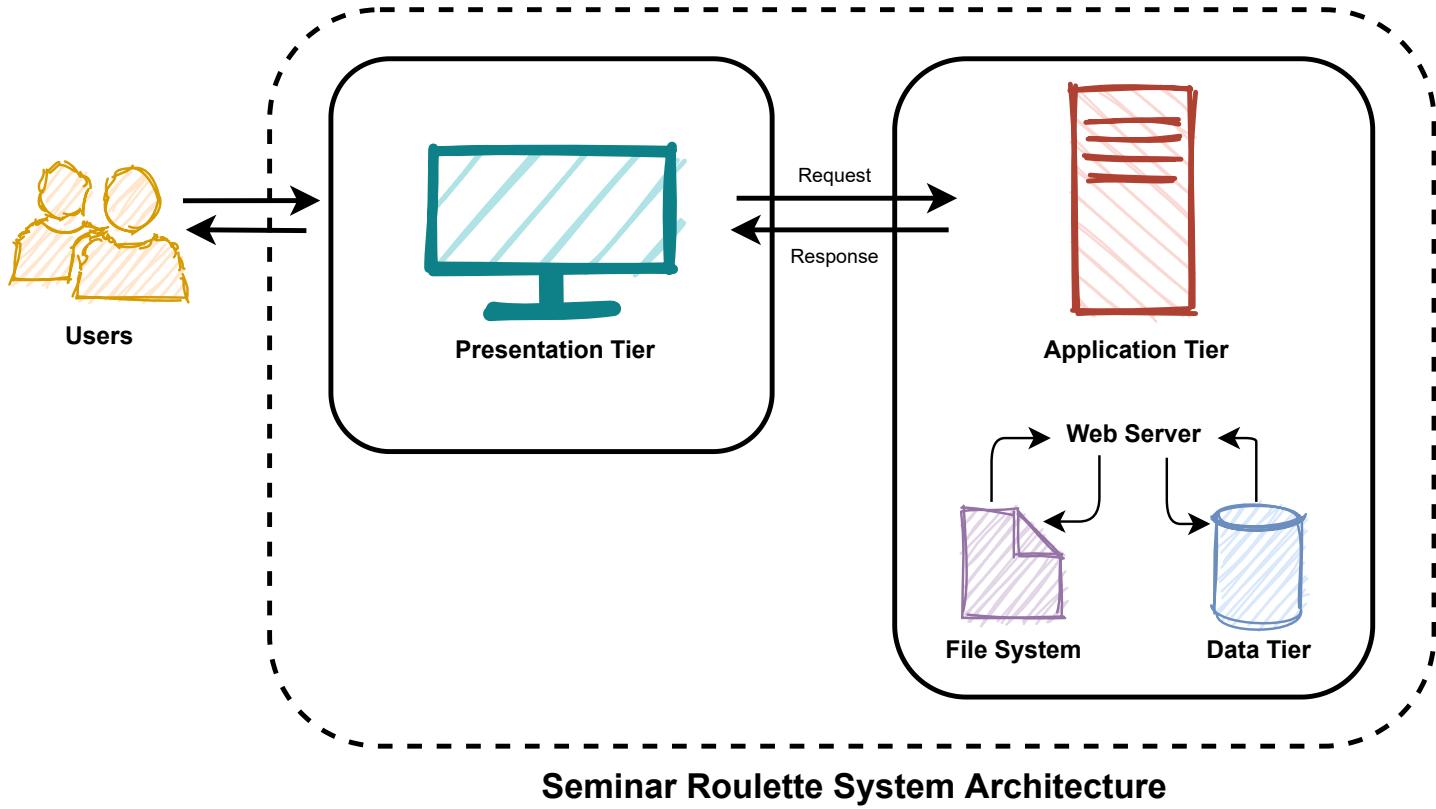
Monday 01 March  
 Books, botany and the organisation of nature in 18th-century Cambridge  
Edwin Rose (University of Cambridge)

Tuesday 02 March  
 Larmer Lecture - Climate change and cascading risks  
Professor Tim Benton Research Director – Emerging Risks, and Director – Energy, Environment and Resources Programme Royal Institute of International Affairs, Chatham House

# Requirements

- Generated user stories and created initial user survey to elicit requirements
- Devised set of functional and non-functional requirements
- Requirements then prioritised using MoSCoW
- Ensure system can scale to 40,000 users

# Design

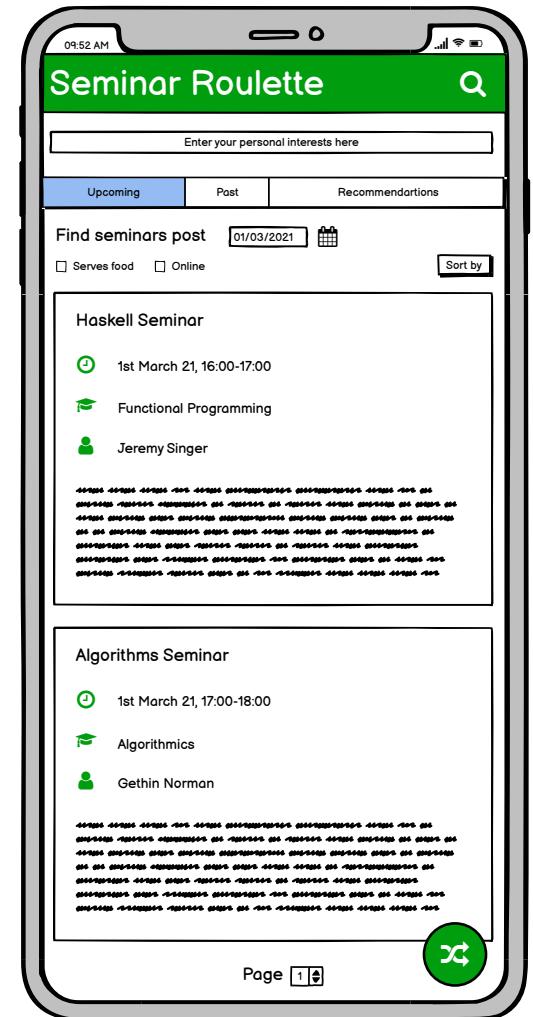


# Design

The screenshot shows the Seminar Roulette website interface. At the top, there's a navigation bar with a search bar and a user profile for "Ollie Gardner". Below the header, there's a form to "Enter your personal interests here". A tab menu includes "Upcoming", "Past", and "Recommendations". A search bar at the top of the main content area has the placeholder "Find seminars post". A date selector shows "01/03/2021". Filter checkboxes for "Serves food" and "Online" are present. A "Sort by" button is also visible. The main content displays six seminar cards in a grid:

- Haskell Seminar**: 1st March 21, 16:00-17:00, Functional Programming, Jeremy Singer
- Algorithms Seminar**: 1st March 21, 17:00-18:00, Algorithmics, Gethin Norman
- Start-up Company Seminar**: 3rd March 21, 10:00-11:00, Entrepreneurship, Mark Logan
- Compiler Seminar**: 4th March 21, 12:00-13:00, Programming Languages, Ornella Dardha
- Software in Industry Seminar**: 4th March 21, 14:00-16:00, Software Engineering, Tim Storer
- A/B Testing Seminar**: 5th March 21, 14:00-15:00, Human Computer Interaction, Matthew Chalmers

At the bottom, there's a page number "Page 1" and a green circular icon with a white symbol.



# Design

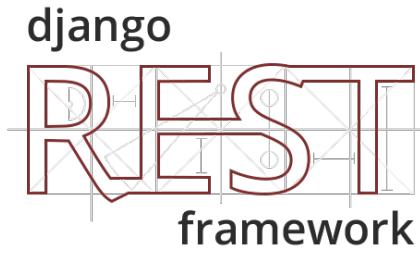
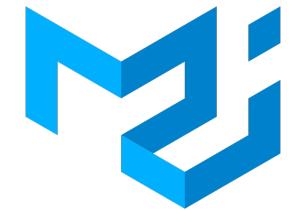
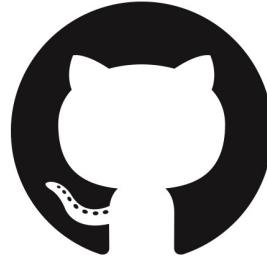
## Matrix Factorisation via Singular Value Decomposition

$$\begin{pmatrix} X_{1,1} & X_{1,2} & \cdots & X_{1,n} \\ X_{2,1} & X_{2,2} & \cdots & X_{2,n} \\ \vdots & \vdots & \ddots & \vdots \\ X_{m,1} & X_{m,2} & \cdots & X_{m,n} \end{pmatrix} = \begin{pmatrix} U_{1,1} & \cdots & U_{1,r} \\ \vdots & \ddots & \vdots \\ U_{m,1} & \cdots & U_{m,r} \end{pmatrix} \begin{pmatrix} S_{1,1} & 0 & \cdots \\ 0 & \ddots & \vdots \\ \vdots & \cdots & S_{r,r} \end{pmatrix} \begin{pmatrix} V_{1,1}^T & \cdots & V_{1,n}^T \\ \vdots & \ddots & \vdots \\ V_{r,1}^T & \cdots & V_{r,n}^T \end{pmatrix}$$

## WuPalmer Similarity

$$score = 2 * \frac{depth(LCS)}{depth(s1) + depth(s2)}$$

# Implementation



# Final Product

## Seminar Roulette

Search seminars...

Discover seminars hosted at the University of Glasgow  
Enter up to 5 of your personal interests below

Your interests: maths, code, machine learning. Your interests

Interests which other users have entered will appear as suggestions but you can also enter your own!

RECOMMENDATIONS   UPCOMING PAST RANDOM

Time frame: All   Serves food  Online only

5 SEMINARS FOUND...

**19 APR 21** Recommendation System and user modelling  
12:00 - 13:00  
 Prof. Min Zhang - Tsinghua University  
 Information Retrieval (IR)  
 Zoom  
 55.6% match based on your interests recommendation system user

**12 APR 21** Document re-ranking and entity set expansion  
12:00 - 13:00  
 Prof. Ben He - University of Chinese Academy of Sciences  
 Information Retrieval (IR)  
 Zoom  
 72.7% match based on your interests document re-ranking entity

...

# Final Product

Seminar Roulette

RECOMMENDATIONS   UPCOMING   PAST   RANDOM

Serves food    Online only    Show previously rated seminars    Show discarded seminars

147 SEMINARS FOUND...

**A usability model for online coding tutorials systems**  
14:30 - 15:00

Ohud Alasmari - University of Glasgow  
Systems Seminars  
Zoom

★★★★★ X

55.6% match based on your interests online systems programming

**Playing Planning Poker in Crowds: Human Computation of Software Effort Estimates**  
14:00 - 14:30

Mohammed Alhamed - University of Glasgow  
Systems Seminars  
Zoom

★★★★★ X

93.3% match based on your interests planning poker software

**FATA Seminar: Design of Dynamic Graph Algorithms via Vertex Sparsifiers**  
13:00 - 14:00

Gramoz Goranci  
Formal Analysis, Theory and Algorithms (FATA)  
Online

★★★★★ X

60% match based on your interests graph algorithms vertex

# Final Product

## Seminar Roulette

Search seminars... Search icon

54 SEMINARS FOUND...

**10 MAR 21** **Time-varying trends in repeated measures data: Model, control, or ignore?**  
14:00 - 15:00

Dale Barr - University of Glasgow  
 Methods & Meta-science  
 62 Hillhead Street, Level 5, Seminar Room

ADD TO CALENDAR

37.5% match based on your interests repeated ignore measurements

Speaker: Dale Barr Abstract: Almost all experiments in psychology and neuroscience involve repeated measurements taken over time. Very often, measurements from individual subjects show temporal variation due to such factors as practice, fatigue, mind wandering, or environmental distraction. However, in our statistical analyses we generally ignore this temporal variation. Under what circumstances is this a problem? And what are the potential benefits of modeling trial-by-trial fluctuations in performance? I will discuss pros and cons of various options for time-series modeling, including non-linear mixed-effects models, polynomial regression, and generalized additive mixed models (GAMMs). I will also discuss the potential for boosting power through experimental design, including results from a new project that is attempting to improve upon conventional randomization strategies.



**10 MAR 21** **FATA Coffee**  
15:00 - 15:30

Various  
 Formal Analysis, Theory and Algorithms (FATA)  
 Online

# Final Product

## Seminar Roulette

Discover seminars hosted at the University of Glasgow  
Enter up to 5 of your personal interests below

Your interests: maths, code, machine learning. Your interests?

RECOMMENDATIONS **UPCOMING** PAST RANDOM

Time frame: All  Serves food  Online only **SORT BY**

54 SEMINARS FOUND...

**10 MAR 21** Time-varying trends in repeated measures data: Model, control, or ignore?  
14:00 - 15:00

By Dale Barr - University of Glasgow  
Methods & Meta-science  
62 Hillhead Street, Level 5, Seminar Room

**ADD TO CALENDAR** 37.5% match based on your interests (repeated, ignore, measurements)

**10 MAR 21** FATA Coffee  
15:00 - 15:30

Various  
Formal Analysis, Theory and Algorithms (FATA)  
Online

**ADD TO CALENDAR** 44.4% match based on your interests (fata, coffee, chance)

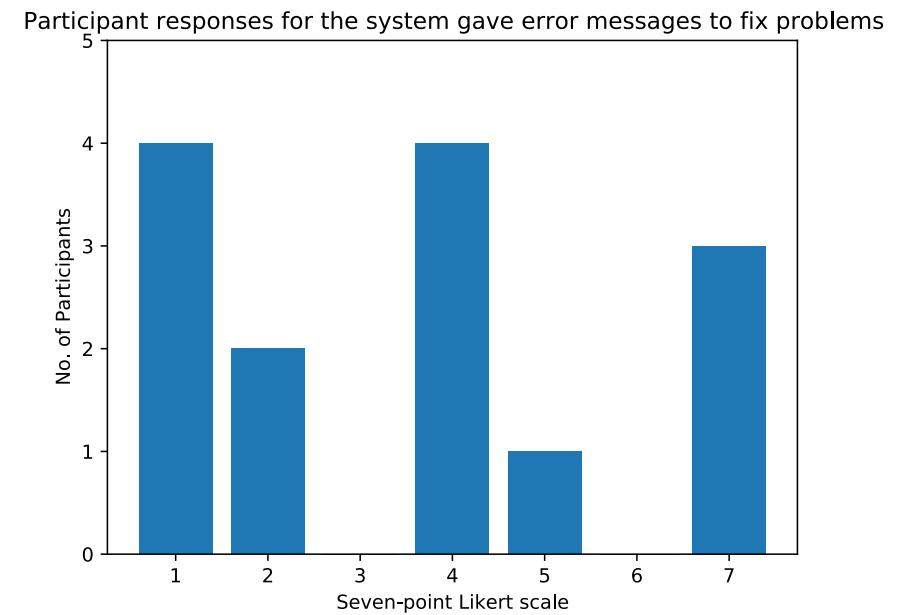
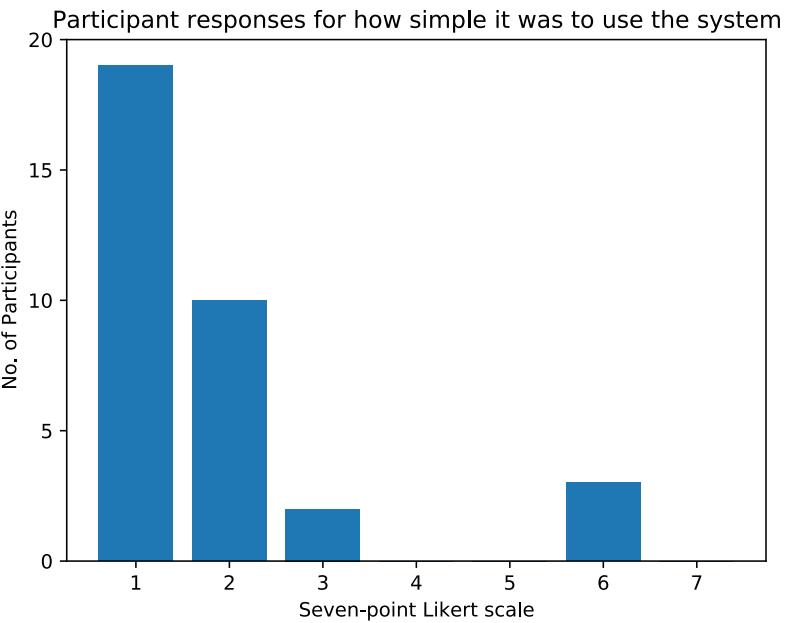
# Evaluation

Module	Statements	Missing	Excluded	Coverage
backend/__init__.py	1	0	0	100%
backend/admin.py	29	0	0	100%
backend/apps.py	13	0	0	100%
backend/managers.py	28	5	0	82%
backend/models.py	87	3	0	97%
backend/serializers.py	32	0	0	100%
backend/tests.py	156	0	0	100%
backend/urls.py	7	0	0	100%
backend/views/views_misc.py	31	1	0	97%
backend/views/views_seminar.py	142	32	0	77%
backend/views/views_user.py	107	40	0	63%
<b>Total</b>	<b>633</b>	<b>81</b>	<b>0</b>	<b>87%</b>

Page	Performance	Accessibility	Best Practices	Time to Interactive (s)	Speed Index (s)
Anonymous	90	82	93	1.5	1.3
Single sign-on	100	68	100	0.4	0.4
Homepage	59	84	93	2.7	3.0
Search	60	84	93	3.1	1.3



# Evaluation



# Evaluation

A word cloud visualization where the size and position of words represent their frequency and importance in the context of evaluation. The most prominent words are 'intuitive', 'easy', 'simple', 'professional', and 'lean'. Other significant words include 'potential', 'effective', 'great', 'sleek', 'quick', 'organised', 'handsome', 'job', 'interest', 'clear', 'structured', 'useful', 'straightforward', 'broadened', 'academic', 'accessible', 'informative', 'familiar', 'efficient', 'engaging', 'design', 'focusing', 'uncluttered', 'issues', 'people', 'cloud', 'interface', 'promising', 'streamlined', 'functional', 'logical', 'responsive', 'interdisciplinary', 'simplistic', 'pleasing', 'infancy', 'lots', 'tool', 'word', 'fast', 'smooth', 'helpful', 'informative', 'aesthetically', 'well', 'minor', 'success', 'teething', 'navigate', 'seminar', 'interesting', 'beautiful', 'focused', 'neat', 'overwhelming', 'events', 'turquoise', 'minimalist', 'pleasant', 'polished', 'modern', 'straight', 'slow', 'university', 'subjects', and 'interesting'.

# Reflection

- Gained insight into inner workings of University of Glasgow systems
- Build clean and responsive user interfaces
- Deployed evaluative techniques potentially used within industry
- Algorithmic recommender system
- Accessibility to impaired users
- Ensure platforms looks and feels like a University of Glasgow product

# Future Work

- Address performance issues
- Implement *could have* requirements
- Extend functionality to more event feeds e.g. Bookitbee, Yammer and Meetup
- White label Seminar Roulette to enable other academic institutions to use it

Thank you!