

Event Expressions

CS462

select when web pageview

select when web pageview
url re#/archives/\d{4}/#

```
select when web pageview  
url re#/archives/(\d{4})/#  
title re#iphone (\w*)#i  
setting(year, next)
```

```
select when web pageview where  
url.extract(re#/archives/(\d{4})/#)  
>  
2003
```

```
select when bank withdrawal  
where amount > 100
```

```
select when bank withdrawal  
        where amount > 100  
before bank deposit  
        where amount > 100
```

- A or B
- A and B
- A before B
- A after B
- A then B
- A between (B, C)
- A not between (B, C)

```
select when inbound_call  
        from re#(\d{3})\d+#+  
between(pageview url re#custserv.html#,  
       pageview url re#homepage.html#)
```

```
select
  when pageview url re#mid.html#
        between(pageview url re#(\d+).html#,
                pageview url re#(\d+).html#)
before pageview
  url re#/archives/(\d+)/foo.html#
```

```
select when pageview url '#custserv.html#'  
       before pageview url '#homepage.html#'  
       within 3 hours
```

```
select when  
    count(4, bank withdrawal  
        where amount > 100)
```

- **any**(n A, B, ...)
- **count**(n, A)
- **repeat**(n, A)

```
select when any(2, pageview url #orbitz#,  
           pageview url #kayak#,  
           pageview url #priceline#,  
           pageview url #travelocity#,  
           pageview url #expedia#)
```

```
select when  
       count(4, bank withdrawal  
                         where amount > 100)  
within 24 hours
```

```
select when
    twilio inbound_call from #(.*)#
        setting (num)
after
    twilio sms_received
        from.match("#"+num+"#")
within 1 hour
```

```
select when  
count(4, bank withdrawal  
amount re#(.*)#)  
avg(x)
```

- $E \max(x)$
- $E \min(x)$
- $E \text{sum}(x)$
- $E \text{avg}(x)$
- $E \text{push}(x)$

```
select when repeat 5  
  (thermostat new_temperature  
  temperature re/(.*))/) avg(avg_temp)
```