

First, we set up our `twitterCommunications` map using the data:

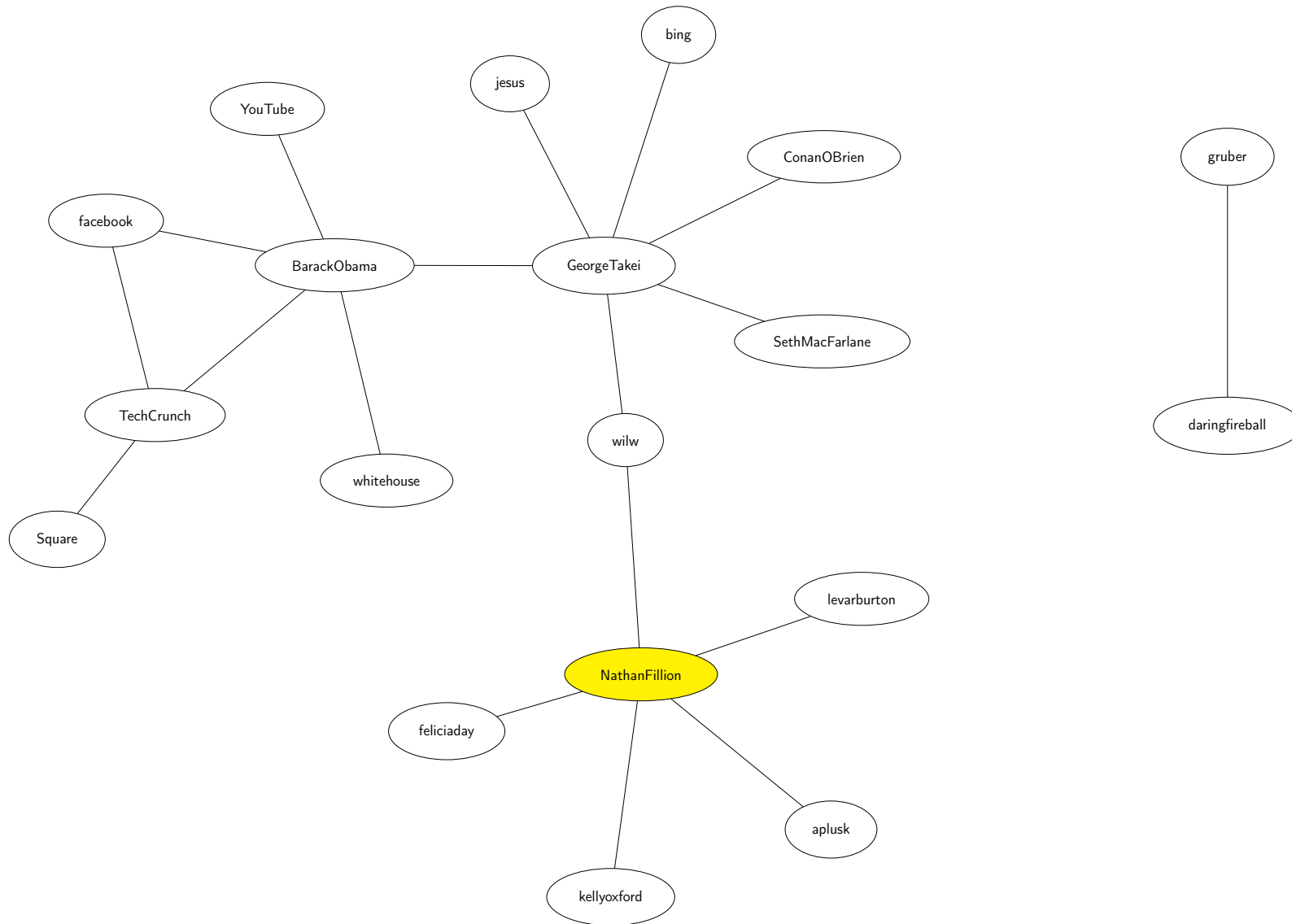
```
Map<String,Set<String>> twitterCommunications = {
    BarackObama      = [GeorgeTakei, TechCrunch, YouTube, facebook, whitehouse],
    ConanOBrien      = [GeorgeTakei],
    GeorgeTakei     = [BarackObama, ConanOBrien, SethMacFarlane, bing, jesus, wilw],
    NathanFillion    = [aplusk, feliciaday, kellyoxford, levarburton, wilw],
    SethMacFarlane   = [GeorgeTakei],
    Square           = [TechCrunch],
    TechCrunch       = [BarackObama, Square, facebook],
    YouTube          = [BarackObama],
    aplusk           = [NathanFillion],
    bing             = [GeorgeTakei],
    facebook         = [BarackObama, TechCrunch],
    feliciaday       = [NathanFillion],
    jesus            = [GeorgeTakei],
    kellyoxford      = [NathanFillion],
    levarburton      = [NathanFillion],
    whitehouse       = [BarackObama],
    wilw             = [GeorgeTakei, NathanFillion]
    gruber           = [daringfireball]
    daringfireball  = [gruber]
}
```

We want to determine how far **NathanFillion** is from **gruber**.

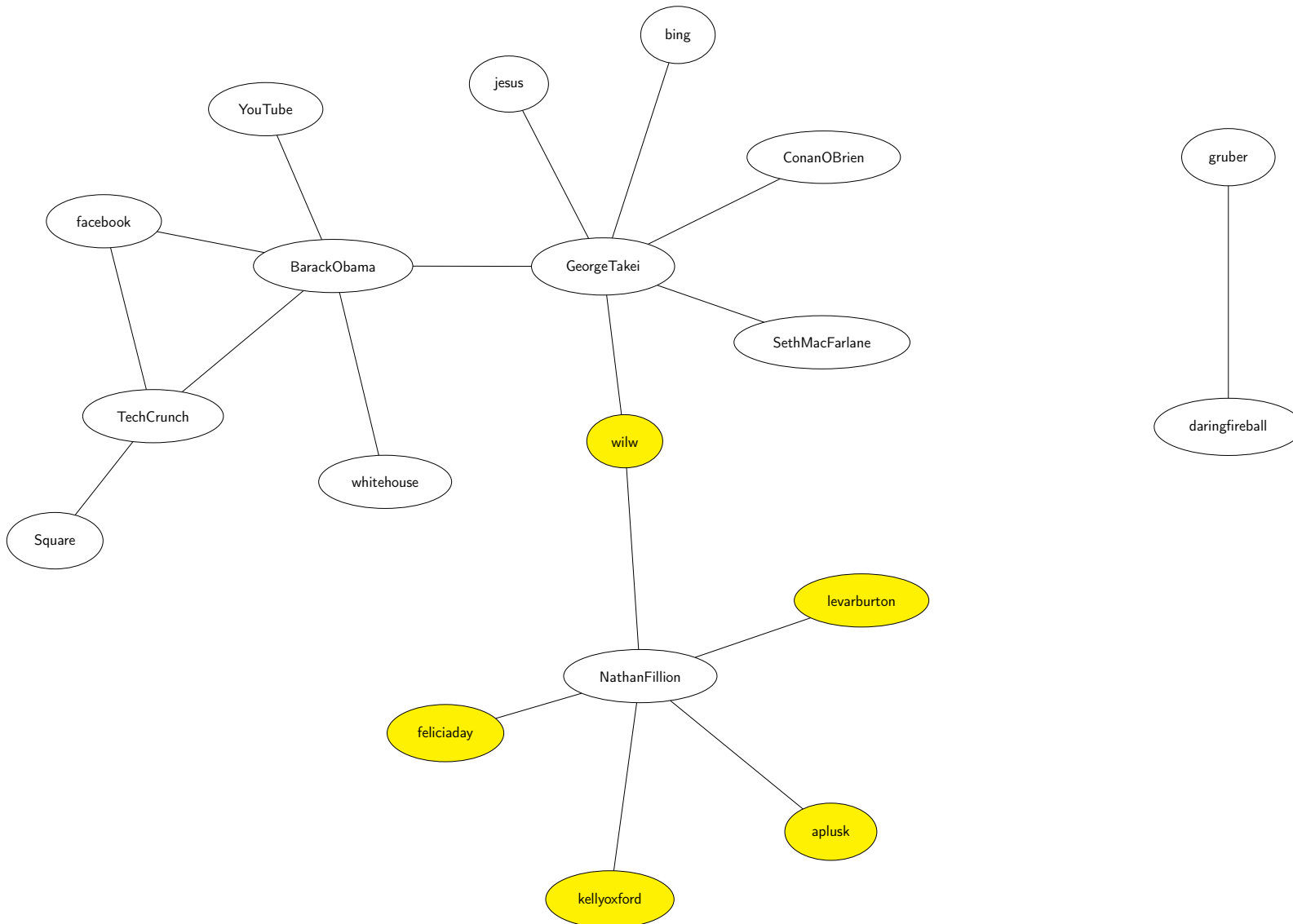
```
int distance = 0;
```

```
Set<String> current = [NathanFillion]
```

```
Set<String> next = [aplusk, feliciaday, kellyoxford, levarburton, wilw]
```



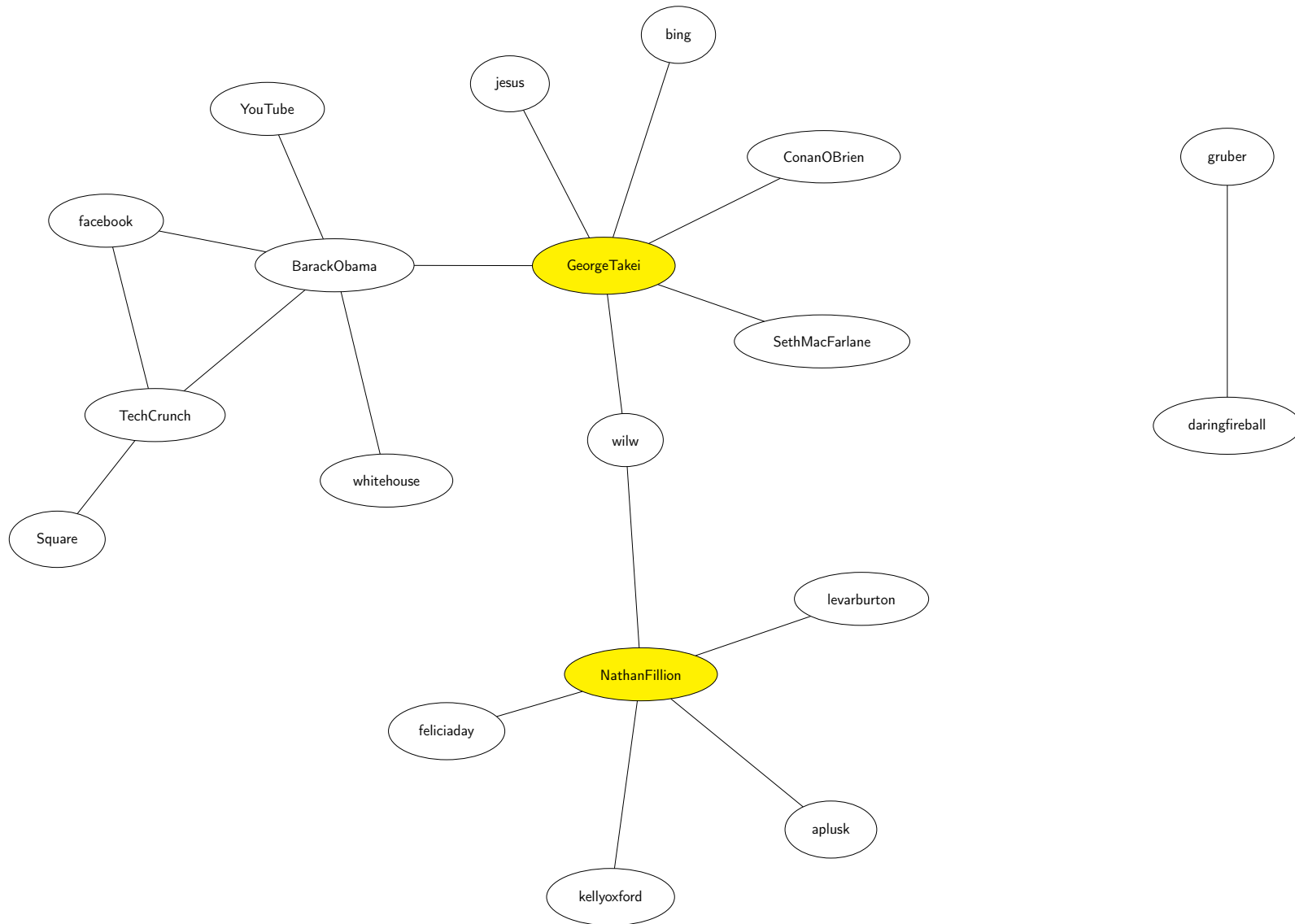
```
int distance = 1;  
Set<String> current = [aplusk, feliciaday, kellyoxford, levarburton, wilw]  
  
Set<String> next = [GeorgeTakei, NathanFillion]
```



```
int distance = 2;
```

```
Set<String> current = [GeorgeTakei, NathanFillion]
```

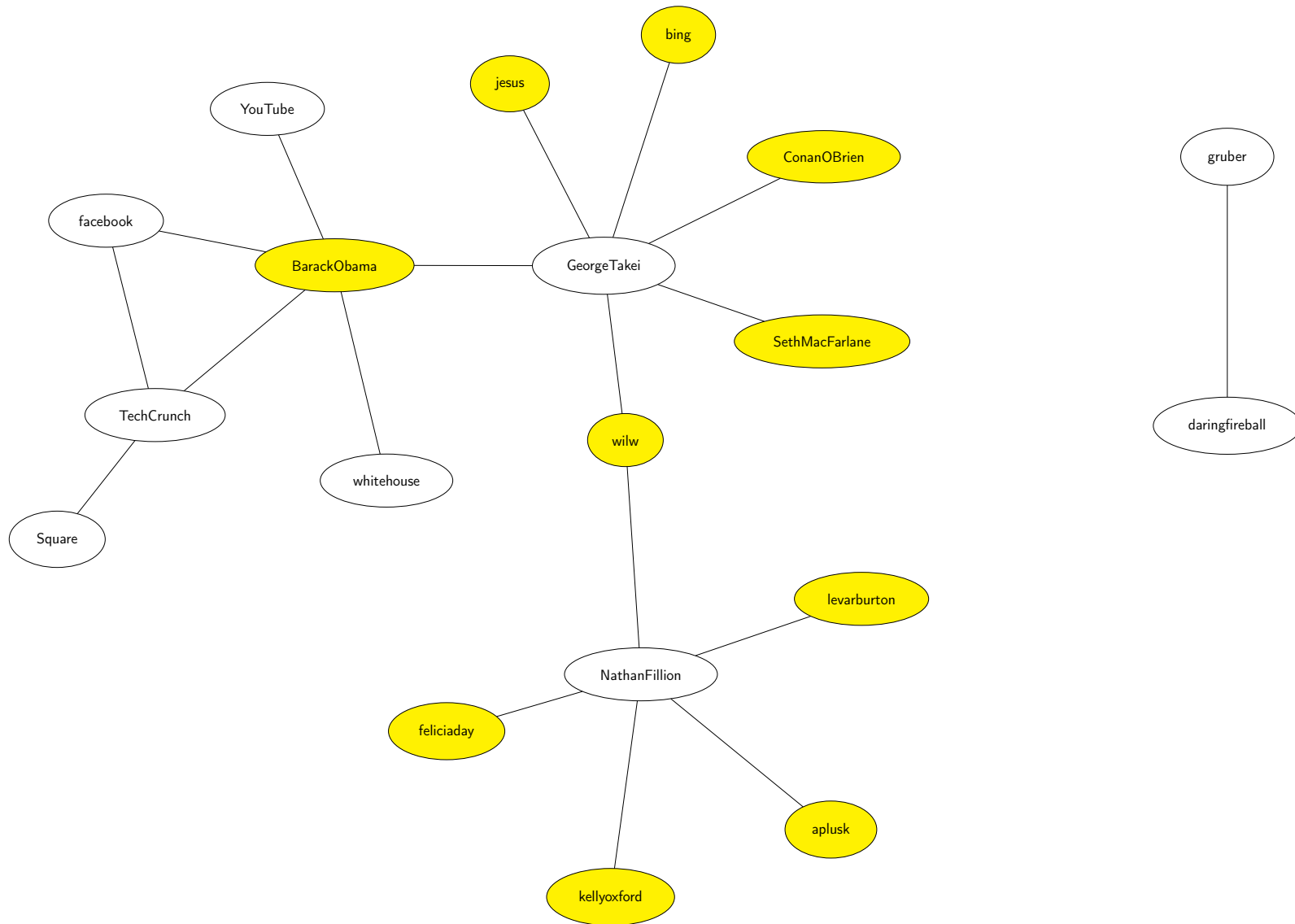
```
Set<String> next = [BarackObama, ConanOBrien, SethMacFarlane, aplusk, bing,  
feliciday, jesus, kellyoxford, levarburton, wilw]
```



```
int distance = 3;
```

```
Set<String> current = [BarackObama, ConanOBrien, SethMacFarlane, aplusk, bing,  
feliaday, jesus, kellyoxford, levarburton, wilw]
```

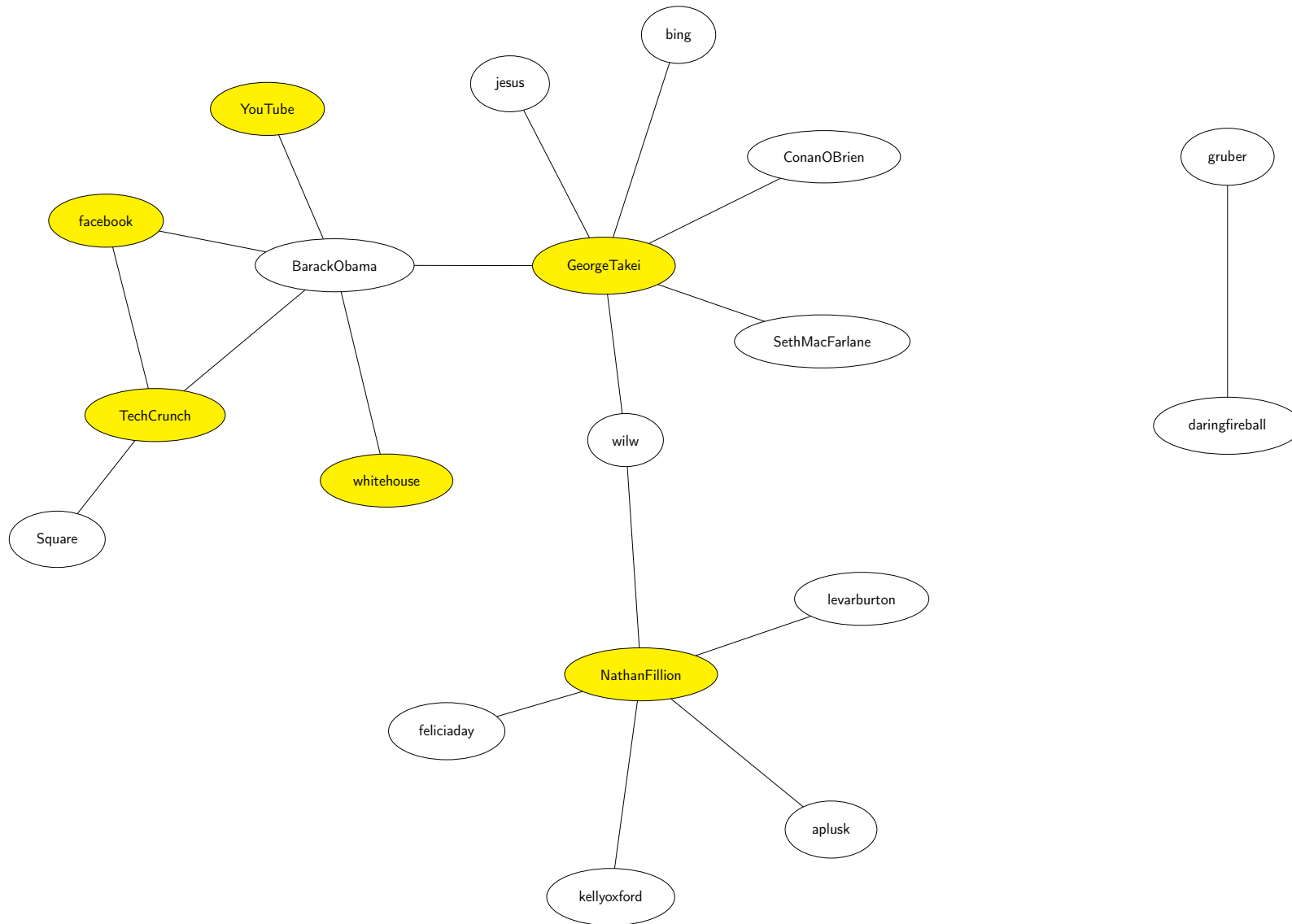
```
Set<String> next = [GeorgeTakei, NathanFillion, TechCrunch, YouTube, facebook,  
whitehouse]
```



```
int distance = 4;
```

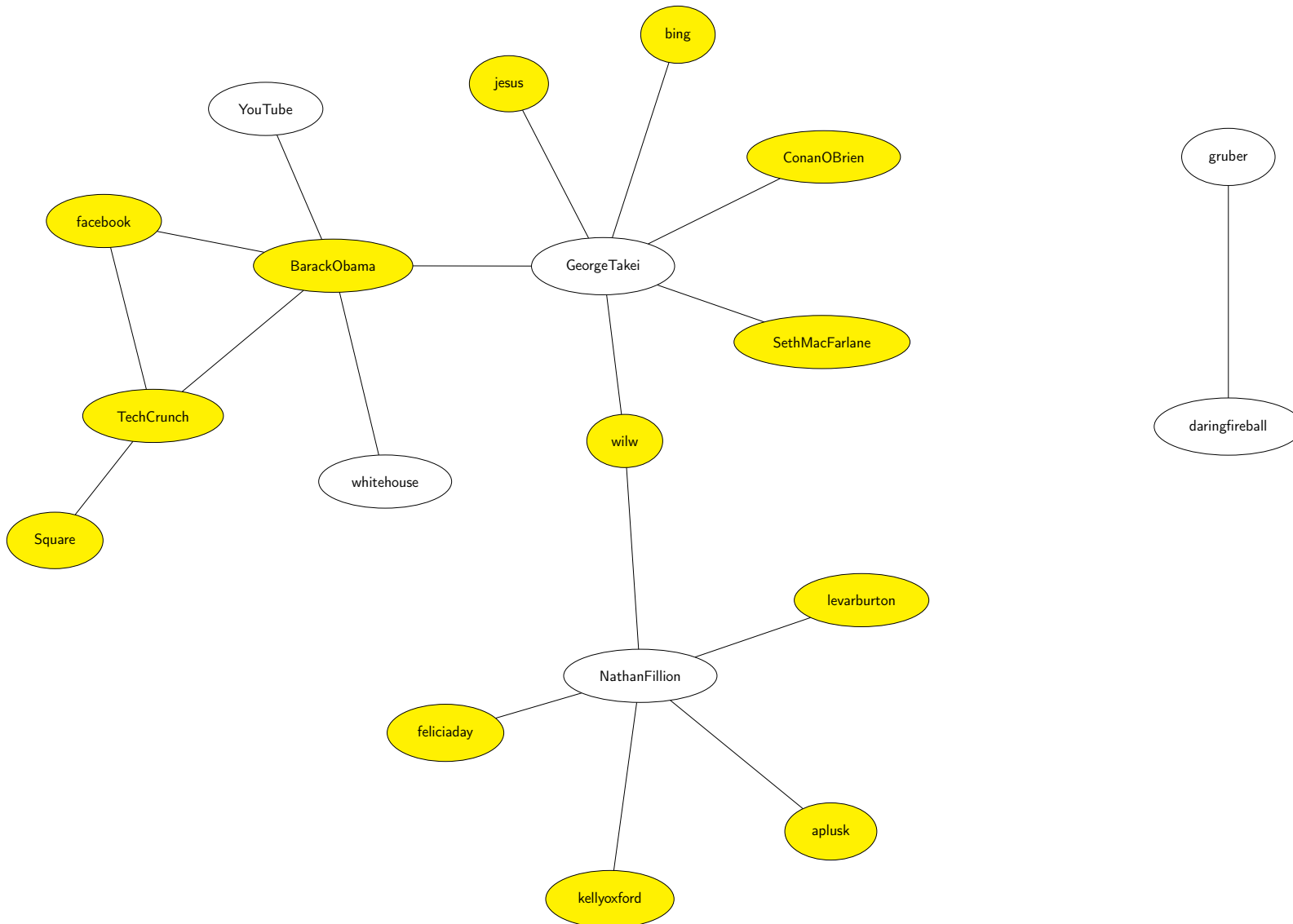
```
Set<String> current = [GeorgeTakei, NathanFillion, TechCrunch, YouTube, facebook, whitehouse]
```

```
Set<String> next = [BarackObama, ConanOBrien, SethMacFarlane, Square, TechCrunch, aplusk, bing, facebook, feliciaday, jesus, kellyoxford, levarburton, wilw]
```



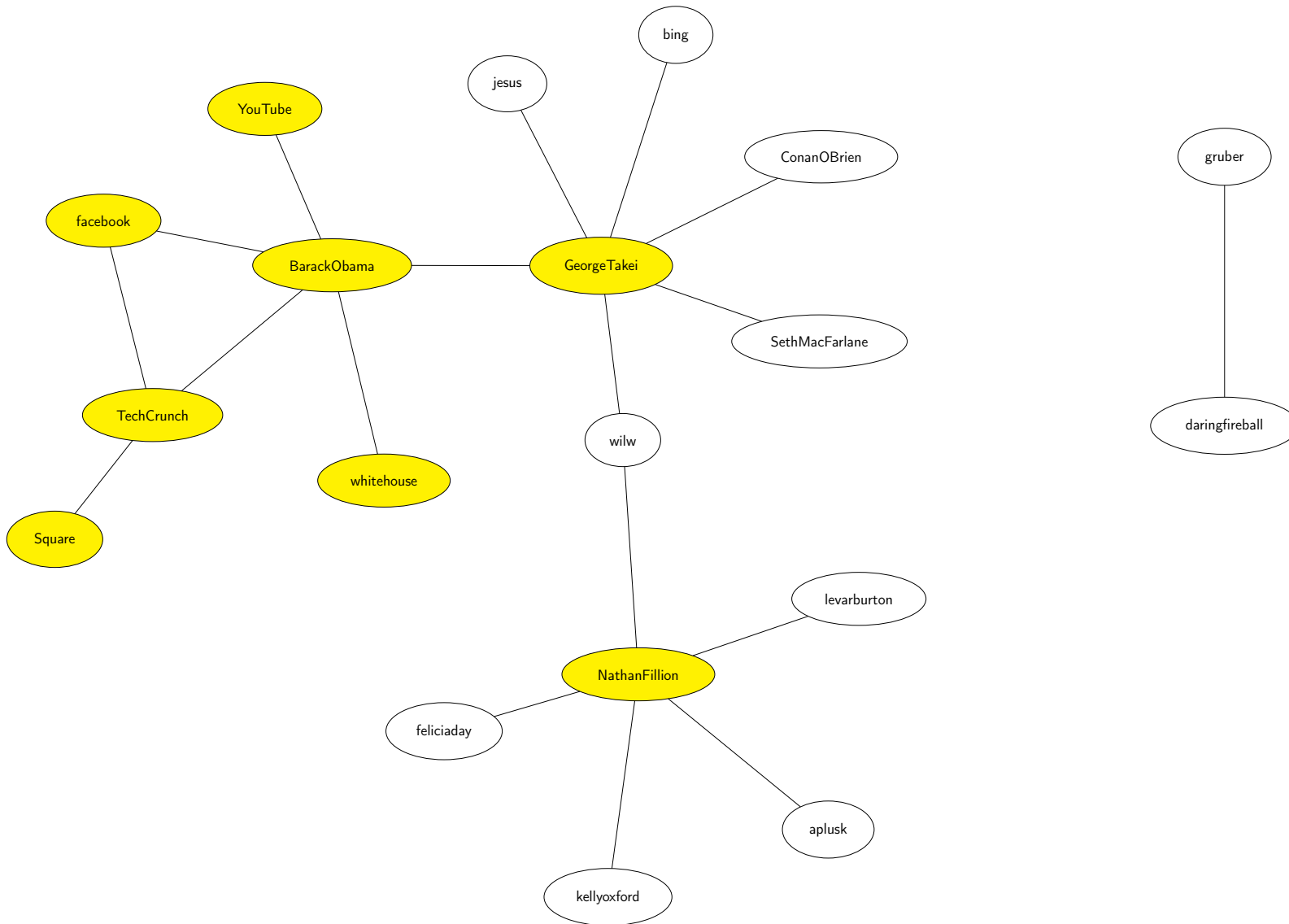
```
int distance = 5;
```

```
Set<String> current = [BarackObama, ConanOBrien, SethMacFarlane, Square, TechCrunch,  
aplusk, bing, facebook, feliciaday, jesus, kellyoxford,  
levarburton, wilw]
```



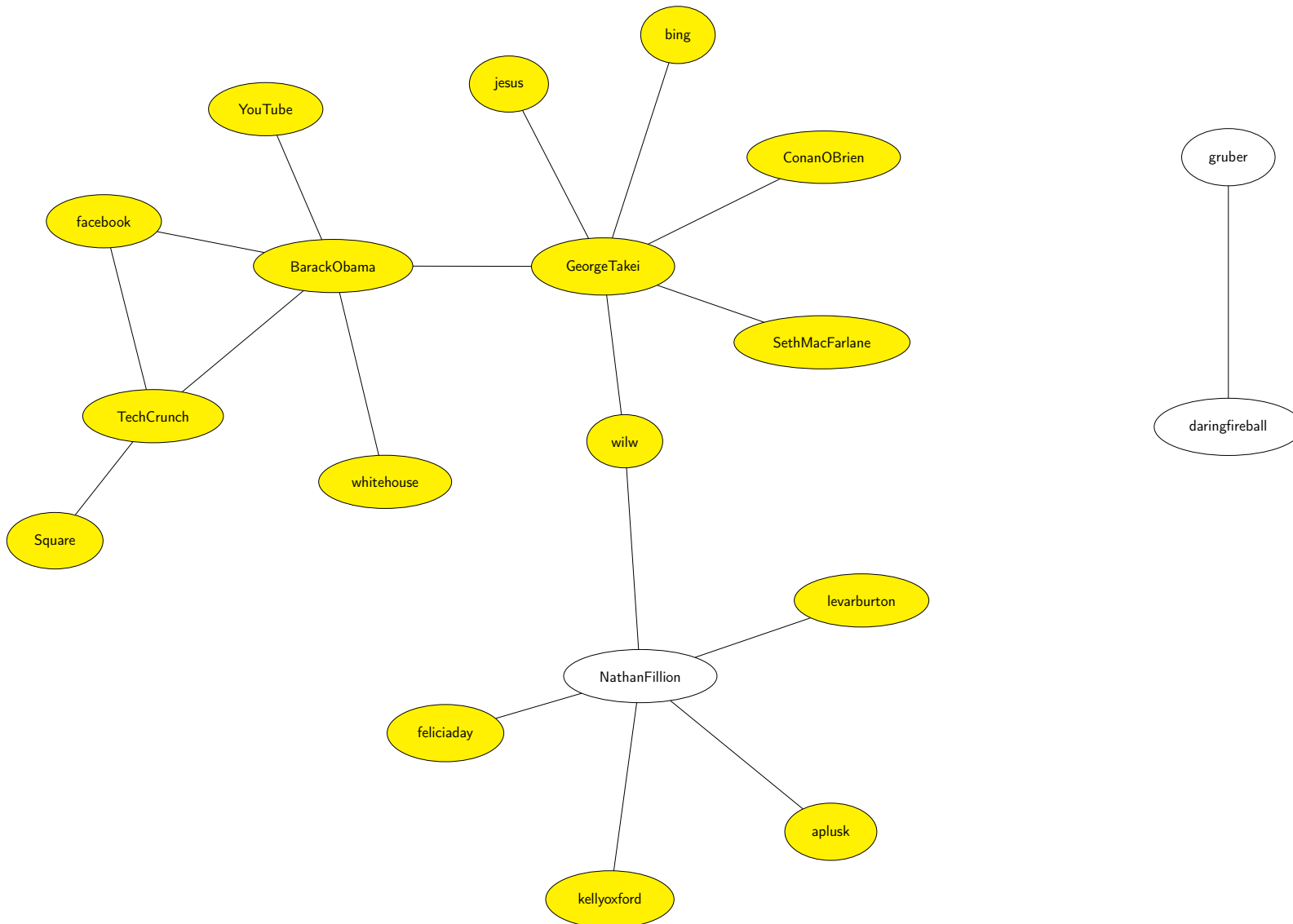
```
int distance = 6;
```

```
Set<String> current = [GeorgeTakei, NathanFillion, TechCrunch, YouTube, facebook,  
whitehouse, Square, BarackObama]
```



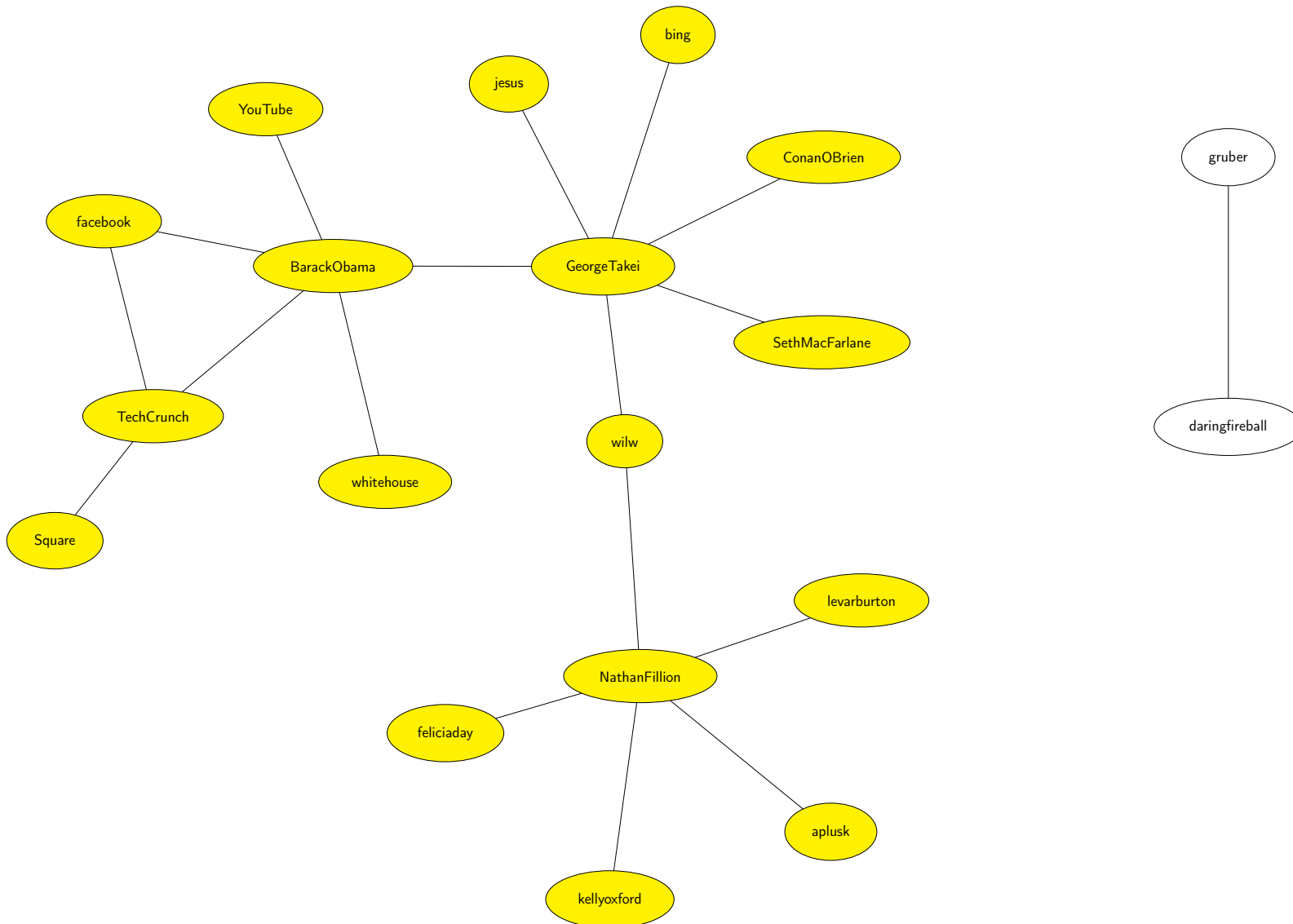

```
int distance = 7;
```

```
Set<String> current = [GeorgeTakei, TechCrunch, YouTube, facebook, whitehouse,  
Square, BarackObama, feliciaday, aplusk, wilw, levarburton,  
jesus, kellyoxford, SethMacFarlane, ConanOBrien, bing]
```

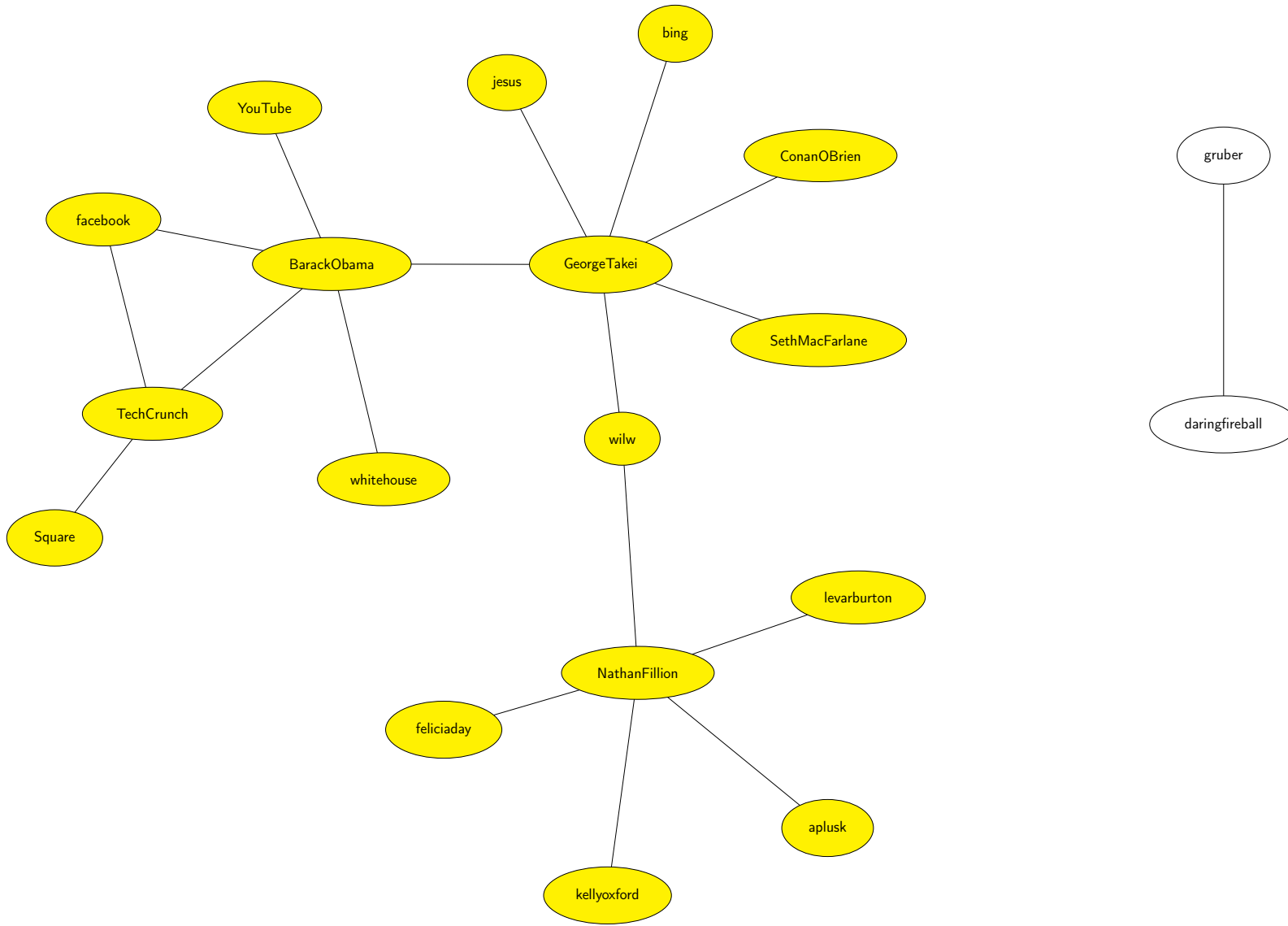


```
int distance = 8;
```

```
Set<String> current = [GeorgeTakei, TechCrunch, YouTube, facebook, whitehouse,  
Square, BarackObama, feliciaday, aplusk, wilw, levarburton,  
jesus, kellyoxford, SethMacFarlane, ConanOBrien, bing,  
NathanFillion]
```



So, finally, we see:



From here on out, we will infinite loop on the same set of actors...