```
1 var branah={
 2 }
 3 ;
 4 branah.util={keyCode:function(b)
    if(!b)
 7
    {
 8
      var b=window.event
 9
10
    if($.browser.mozilla)
11
12
      var a=b.keyCode;
13
     switch(a)
14
15
        case 59:a=186;
16
       break;
17
        case 107:a=187;
18
       break;
19
        case 109:a=189;
20
        break;
21
        case 61:a=187;
22
        break;
23
       case 173:a=189;
24
        break
25
      }
26
     return a
27
28
    if($.browser.opera)
29
30
      var a=b.keyCode;
31
     switch(a)
32
33
        case 59:a=186;
       break;
34
       case 61:a=187;
35
        break;
36
37
        case 109:a=189;
38
        break
39
      }
40
     return a
41
    }
42
   return b.keyCode
43 }
44 ,isCtrl:function(a)
45 {
46
   if(!a)
47
    {
48
     var a=window.event
49
     }
50
    return a.ctrlKey
51 }
52 ,isAlt:function(a)
53 {
54
    if(!a)
55
    {
56
     var a=window.event
57
58
    return a.altKey
59 }
60 , isShift:function(a)
61 {
62
    if(!a)
63
    {
64
      var a=window.event
65
66
    return a.shiftKey
```

```
67 }
 68 ,insertAtCaret:function(a,f)
 69 {
      var d=this.getSelectionStart(a);
 71
      var b=this.getSelectionEnd(a);
 72
      var c=a.value.length;
 73
      a.value=a.value.substring(0,d)+f+a.value.substring(b,c);
 74
      this.setCaretPosition(a,d+f.length,0)
 75 }
 76 ,deleteAtCaret:function(c,b,a)
 77 {
 78
      var g=this.getSelectionStart(c);
 79
      var d=this.getSelectionEnd(c);
 80
      var f=c.value.length;
 81
      if(b>g)
 82
 83
        b=q
 84
 85
      if(d+a>f)
 86
 87
        a=f-d
 88
      }
 89
      var h=c.value.substring(g-b,d+a);
 90
      c.value=c.value.substring(0,g-b)+c.value.substring(d+a);
 91
      this.setCaretPosition(c, q-b, 0);
 92
      return h
 93 }
 94 , getSelectionStart:function(a)
 95 {
 96
      a.focus();
 97
      if (a.selectionStart!==undefined)
 98
      {
 99
        return a.selectionStart
100
      }
101
      else
102
      {
103
        if (document.selection)
104
105
          var b=document.selection.createRange();
106
          if (b==null)
107
          {
108
            return 0
109
          }
110
          var d=a.createTextRange();
111
          var c=d.duplicate();
112
          d.moveToBookmark(b.getBookmark());
113
          c.setEndPoint("EndToStart",d);
114
          return c.text.length
115
        }
116
117
      }
118
      return 0
119 }
120 , getSelectionEnd: function(a)
121 {
122
      a.focus();
123
      if (a.selectionEnd!==undefined)
124
      {
125
        return a.selectionEnd
126
127
      else
128
      {
129
        if (document.selection)
130
131
          var b=document.selection.createRange();
132
          if (b==null)
```

```
133
          {
134
            return 0
135
          }
136
          var d=a.createTextRange();
          var c=d.duplicate();
137
138
          d.moveToBookmark(b.getBookmark());
139
          c.setEndPoint("EndToStart",d);
140
          return c.text.length+b.text.length
141
142
143
      }
144
      return a.value.length
145 }
146 , setCaretPosition: function(b, d, a)
147 {
148
      var c=b.value.length;
149
      if(d>c)
150
     {
151
        d=c
152
153
      if(d+a>c)
154
     {
155
        a=c-a
156
      }
157
      b.focus();
158
      if (b.setSelectionRange)
159
160
        b.setSelectionRange(d,d+a)
161
      }
162
      else
163
      {
164
        if (b.createTextRange)
165
166
          var f=b.createTextRange();
          f.collapse(true);
167
168
          f.moveEnd("character", d+a);
169
          f.moveStart("character",d);
170
          f.select()
171
        }
172
173
      }
174
      b.focus()
175 }
176 , selectAll: function(a)
177 {
    this.setCaretPosition(a,0,a.value.length)
178
179 }
180
181 }
182 ;
183 branah.layout=function()
184 {
185
      this.keys=[];
186
      this.deadkeys=[];
187
      this.dir="ltr";
188
      this.name="US";
189
      this.lang="en"
190 }
191;
192 branah.layout.prototype.loadDefault=function()
193 {
      this.keys=[{i:"k0",c:"0",n:"`",s:"~"
194
195 }
196 ,{i:"k1",c:"0",n:"1",s:"!"
197 }
198 ,{i:"k2",c:"0",n:"2",s:"@"
```

```
199 }
200 ,{i:"k3",c:"0",n:"3",s:"#"
201 }
202 ,{i:"k4",c:"0",n:"4",s:"$"
203 }
204 ,{i:"k5",c:"0",n:"5",s:"%"
205 }
206 ,{i:"k6",c:"0",n:"6",s:"^"
207 }
208 ,{i:"k7",c:"0",n:"7",s:"&"
209 }
210 ,{i:"k8",c:"0",n:"8",s:"*"
211 }
212 ,{i:"k9",c:"0",n:"9",s:"("
213 }
214 ,{i:"k10",c:"0",n:"0",s:")"
215 }
216 ,{i:"k11",c:"0",n:"-",s:" "
217 }
218 ,{i:"k12",c:"0",n:"=",s:"+"
219 }
220 ,{i:"k13",c:"1",n:"q",s:"Q"
221 }
222 ,{i:"k14",c:"1",n:"w",s:"W"
223 }
224 ,{i:"k15",c:"1",n:"e",s:"E"
225 }
226 ,{i:"k16",c:"1",n:"r",s:"R"
227 }
228 ,{i:"k17",c:"1",n:"t",s:"T"
229 }
230 ,{i:"k18",c:"1",n:"y",s:"Y"
231 }
232 ,{i:"k19",c:"1",n:"u",s:"U"
233 }
234 ,{i:"k20",c:"1",n:"i",s:"I"
235 }
236 ,{i:"k21",c:"1",n:"o",s:"0"
237 }
238 ,{i:"k22",c:"1",n:"p",s:"P"
239 }
240 ,{i:"k23",c:"0",n:"[",s:"{"
241 }
242 ,{i:"k24",c:"0",n:"]",s:"
243 }
244 "
245 }
246 ,{i:"k25",c:"0",n:"\\",s:"|"
247 }
248 ,{i:"k26",c:"1",n:"a",s:"A"
249 }
250 ,{i:"k27",c:"1",n:"s",s:"S"
251 }
252 ,{i:"k28",c:"1",n:"d",s:"D"
253 }
254 ,{i:"k29",c:"1",n:"f",s:"F"
255 }
256 ,{i:"k30",c:"1",n:"g",s:"G"
257 }
258 ,{i:"k31",c:"1",n:"h",s:"H"
259 }
260 ,{i:"k32",c:"1",n:"j",s:"J"
261 }
262 ,{i:"k33",c:"1",n:"k",s:"K"
263 }
264 ,{i:"k34",c:"1",n:"1",s:"L"
```

```
265 }
266 ,{i:"k35",c:"0",n:";
267 ",s:":"
268 }
269 ,{i:"k36",c:"0",n:"'",s:'"'
270 }
271 ,{i:"k37",c:"1",n:"z",s:"Z"
272 }
273 ,{i:"k38",c:"1",n:"x",s:"X"
274 }
275 ,{i:"k39",c:"1",n:"c",s:"C"
276 }
277 ,{i:"k40",c:"1",n:"v",s:"V"
278 }
279 ,{i:"k41",c:"1",n:"b",s:"B"
280 }
281 ,{i:"k42",c:"1",n:"n",s:"N"
282 }
283 ,{i:"k43",c:"1",n:"m",s:"M"
284 }
285 ,{i:"k44",c:"0",n:",",s:"<"
286 }
287 ,{i:"k45",c:"0",n:".",s:">"
288 }
289 ,{i:"k46",c:"0",n:"/",s:"?"
290 }
291 ,{i:"k47",c:"0",n:"\\",s:"|"
292 }
293];
294 this.dir="ltr";
295 this.name="US";
296 this.lang="en"
297 }
298 ;
299 branah.layout.prototype.load=function(a)
300 {
301
      this.keys=a.keys;
302
      this.deadkeys=a.deadkeys;
303
      this.dir=a.dir;
304
      this.name=a.name;
305
      this.lang=a.lang?a.lang:"en"
306 }
307;
308 branah.layout.parser={keyCodes: [192,49,50,51,52,53,54,55,56,57,48,189,187,81,87
    ,69,82,84,89,85,73,79,80,219,221,220,65,83,68,70,71,72,74,75,76,186,222,90,88,6
    7,86,66,78,77,188,190,191,220],getKeyCode:function(c,e,b)
309 {
310
      var d=c.length;
311
      for (var a=0;
312
      a < d;
313
      a++)
314
      {
315
        if(c[a].i==b)
316
        {
317
          return e==1?(c[a].s?c[a].s:""):(c[a].n?c[a].n:"")
318
319
320
321
      return 0
322 }
323 , getKey: function(c,b)
324
325
      var d=c.length;
326
      for (var a=0;
327
      a < d;
328
      a++)
```

```
329
330
        if(c[a].i==b)
331
332
         return c[a]
333
334
335
     }
336
     return null
337 }
338 ,isDeadkey:function(a,d)
339 {
340
     if(!a)
341
    {
342
      return false
343
344
    var c=a.length;
345
    for(var b=0;
346
    b<c;
347
    b++)
348
349
       if(a[b].k==d)
350
351
         return true
352
353
354
     }
355 return false
356 }
357 ,getMappedValue:function(a,e,d)
358 {
359
     if(!a)
360
     {
     return""
361
362
     }
363
     var c=a.length;
364
     for(var b=0;
365
     b<c;
366
     b++)
367
     {
368
      if(a[b].k==d&&a[b].b==e)
369
370
        return a[b].c
371
372
373
      }
374
     return""
375 }
376 ,getKeyId:function(b)
377 {
378
     for (var a=0;
379
     a<48;
380
     a++)
381
     {
382
      if (this.keyCodes[a] ==b)
383
       {
384
        return a
385
386
387
      }
388
     return -1
389 }
390 ,getState:function(d,a,e,b,c)
391 {
     var f="n";
392
393
      if(!a&&!e&&d)
394
      {
```

```
395 f="n"
396 }
397 else
398
    {
399
      if(!a&&e&&!d)
400
        f="s"
401
402
       }
403
       else
404
       {
405
         if(!a&&e&&d)
406
          f="s"
407
408
409
        else
410
411
           if(a&&!e&&!d)
412
           f="n"
413
414
           }
415
           else
416
417
             if(a&&!e&&d)
418
             f="t"
419
420
             }
421
             else
422
423
               if(a&&e&&!d)
424
               f="s"
425
426
               }
427
               else
428
               {
429
                 if(a&&e&&d)
430
                 f="f"
431
432
433
434
               }
435
436
             }
437
438
            }
439
440
441
442
443
444
     if((f=="n"||f=="s")&&b)
445
     {
446
     if(c=="1")
447
448
       {
        if(f=="n")
449
         {
450
         f="s"
451
452
453
         else
454
          f="n"
455
456
457
458
        if(c=="SGCap")
459
460
       {
```

```
461
          if(f=="n")
462
            f="v"
463
464
465
          else
466
            if(f=="s")
467
468
              f="z"
469
470
471
472
473
474
475
476
477
      return f
478 }
479
480 }
481 ;
482 branah.keyboard=function(a,d)
483 {
484
      this.defaultLayout=new branah.layout();
485
      this.defaultLayout.loadDefault();
486
      this.virtualLayout=new branah.layout();
487
      this.virtualLayout.loadDefault();
488
      this.currentLayout=this.virtualLayout;
489
      this.shift=false;
490
      this.shiftOn=false;
491
     this.caps=false;
492
     this.capsOn=false;
493
     this.alt=false;
494
     this.ctrl=false;
495
      this.altCtrlOn=false;
496
      this.fontSize=18;
497
      this.counter=0;
      this.interval=0;
498
499
      this.prev="";
500
      this.cancelkeypress=false;
      this.customOnBackspace=function(e)
501
502
      {
503
504
      }
505
506
      this.customOnEnter=function()
507
508
509
      }
510
511
      this.customOnSpace=function()
512
      {
513
        return false
514
515
516
      this.customOnKey=function(e)
517
      {
518
        return false
519
520
521
      this.customOnEsc=function()
522
523
524
525
526
      this.customDrawKeyboard=function(e)
```

```
527
      {
528
        return e
529
      }
530
531
     this.textbox=$("#"+d);
532
      this.nativeTextbox=document.getElementById(d);
533
      var c=['<div id="branah-keyboard">'];
534
      for (var b=0;
535
     b<13;
536
     b++)
537
      {
538
        c.push('<button id="branah-k',b,'" class="branah-key"></button>')
539
540
      c.push('<button id="branah-backspace"><span>Backspace</span></button>');
541
      c.push('<div class="branah-clear"></div>');
542
      c.push('<button id="branah-tab"><span>Tab</span></button>');
543
      for (var b=13;
544
     b < 25;
545
     b++)
546
547
        c.push('<button id="branah-k',b,'" class="branah-key"></button>')
548
549
      c.push('<button id="branah-k25"></button>');
550
      c.push('<div class="branah-clear"></div>');
551
      c.push('<button id="branah-caps-lock"><span>Caps Lock</span></button>');
552
      for (var b=26:
553
     b < 37;
554
     b++)
555
      {
        c.push('<button id="branah-k',b,'" class="branah-key"></button>')
556
557
      c.push('<button id="branah-enter" class="branah-enter"><span>Enter</span></bu</pre>
558
    tton>');
559
      c.push('<div class="branah-clear"></div>');
560
      c.push('<button id="branah-left-shift"><span>Shift</span></button>');
561
      c.push('<button id="branah-k47" class="branah-key"></button>');
562
      for (var b=37;
     b < 47;
563
564
     b++)
565
      {
566
        c.push('<button id="branah-k',b,'" class="branah-key"></button>')
567
568
      c.push('<button id="branah-right-shift"><span>Shift</span></button>');
569
      c.push('<div class="branah-clear"></div>');
570
      c.push('<button id="branah-left-ctrl"><span>Ctrl</span></button>');
571
      c.push('<button id="branah"><span>branah</span></button>');
572
      c.push('<button id="branah-left-alt"><span>Alt</span></button>');
      c.push('<button id="branah-space"><span>Space</span></button>');
573
574
      c.push('<button id="branah-right-alt"><span>Alt</span></button>');
      c.push('<button id="branah-escape" title="Turn on/off keyboard input conversi
    on"><span>Esc</span></button>');
576
      c.push('<button id="branah-right-ctrl"><span>Ctrl</span></button>');
      c.push('<div class="branah-clear"></div>');
577
578
      c.push("</div>");
579
      document.getElementById(a).innerHTML=c.join("");
580
      this.wireEvents();
581
      this.drawKeyboard()
582 }
583;
584 branah.keyboard.prototype.loadDefaultLayout=function(a)
585 {
586
      this.defaultLayout.load(a);
587
      this.drawKeyboard()
588 }
589;
590 branah.keyboard.prototype.loadVirtualLayout=function(a)
```

```
591 {
592
      this.virtualLayout.load(a);
      this.drawKeyboard();
      this.textbox.attr("dir",this.attr("dir"))
594
595 }
596;
597 branah.keyboard.prototype.switchLayout=function()
598 {
599
      this.currentLayout=(this.currentLayout===this.defaultLayout)?this.virtualLayo
   ut:this.defaultLayout;
600
      this.reset();
601
      this.drawKeyboard();
602
      this.textbox.attr("dir",this.attr("dir"))
603 }
604;
605 branah.keyboard.prototype.onEsc=function()
606 {
607
      this.switchLayout();
608
      this.customOnEsc()
609 }
610 ;
611 branah.keyboard.prototype.onShift=function()
612 {
613
      this.shift=!this.shift;
614
      this.drawKeyboard()
615 }
616 ;
617 branah.keyboard.prototype.onAlt=function()
618 {
619
      this.alt=!this.alt;
620
      this.drawKeyboard()
621 }
622 ;
623 branah.keyboard.prototype.onCtrl=function()
624 {
625
      this.ctrl=!this.ctrl;
626
      this.drawKeyboard()
627 }
628 ;
629 branah.keyboard.prototype.onCapsLock=function()
630 {
      this.caps=!this.caps;
631
632
      this.drawKeyboard()
633 }
634 ;
635 branah.keyboard.prototype.onBackspace=function()
636 {
637
      if(this.prev!="")
638
      {
639
        this.prev="";
640
        this.shift=false;
641
        this.drawKeyboard()
642
      }
643
      else
644
645
        var a=branah.util.deleteAtCaret(this.nativeTextbox,1,0);
646
        this.customOnBackspace(a)
647
648
649 }
650;
651 branah.keyboard.prototype.onEnter=function()
652 {
653
      branah.util.insertAtCaret(this.nativeTextbox,"\u000A");
654
      this.customOnEnter()
655 }
```

```
656 ;
657 branah.keyboard.prototype.onSpace=function()
      if(!this.customOnSpace())
660
661
        branah.util.insertAtCaret(this.nativeTextbox,"\u0020")
662
663
664 }
665;
666 branah.keyboard.prototype.attr=function(a)
667 {
668
      if(a=="dir")
669
670
        return this.currentLayout.dir
671
      }
672
      else
673
      {
        if(a=="lang")
674
675
676
          return this.currentLayout.lang
677
        }
678
        else
679
          if(a=="name")
680
681
682
            return this.currentLayout.name
683
684
685
686
687
      }
      return""
688
689 }
690 ;
691 branah.keyboard.prototype.reset=function()
692 {
693
     this.shift=false;
694
     this.caps=false;
695
     this.alt=false;
696
      this.ctrl=false;
697
      this.counter=0;
698
      this.interval=0;
699
      this.prev=""
700 }
701 ;
702 branah.keyboard.prototype.stopRepeat=function()
703 {
704
      if(this.interval!=0)
705
      {
706
        clearInterval(this.interval);
707
        this.counter=0;
708
        this.interval=0
709
710
711 }
713 branah.keyboard.prototype.onKey=function(b)
714 {
715
      var a=branah.layout.parser.getKey(this.currentLayout.keys,b);
716
      if(a)
717
718
        var d=branah.layout.parser.getState(this.ctrl,this.alt,this.shift,this.caps
    ,a.c?a.c:"0");
719
       var e=a[d]?a[d]:"";
720
        if(this.prev!="")
```

```
721
        {
722
          var c=branah.layout.parser.getMappedValue(this.currentLayout.deadkeys,e,t
    his.prev);
          if(c!="")
723
724
725
            branah.util.insertAtCaret(this.nativeTextbox,c)
726
727
          this.prev=""
728
        }
729
        else
730
        {
731
          if (branah.layout.parser.isDeadkey(this.currentLayout.deadkeys,e))
732
733
             this.prev=e
734
          }
735
          else
736
            if(e!="")
737
738
739
               if(!this.customOnKey(e))
740
741
                 branah.util.insertAtCaret(this.nativeTextbox,e)
742
743
744
             }
745
746
747
748
749
750
751
752 }
753 ;
754 branah.keyboard.prototype.drawKeyboard=function()
755 {
756
      if(!this.currentLayout.keys)
757
      {
758
        return
759
      }
760
      var d,f,j,k;
761
      var g=this.currentLayout.keys.length;
762
      for(var e=0;
763
      e<g;
764
      e++)
765
      {
766
        f=this.currentLayout.keys[e];
767
        if(!$("branah-"+f.i))
768
        {
769
          continue
770
771
        var c=this.ctrl;
772
        var a=this.alt;
773
        var h=this.shift;
774
        var b=this.caps;
775
        if(this.shiftOn)
776
        {
777
          h=true
778
779
        if(this.capsOn)
780
        {
781
          b=true
782
783
        if(this.altCtrlOn)
784
        {
785
          c=true;
```

```
786
          a=true
787
788
        i=branah.layout.parser.getState(c,a,h,b,f.c?f.c:"0");
        k=f[j]?f[j]:"";
789
        if(this.prev!="")
790
791
792
          k=branah.layout.parser.getMappedValue(this.currentLayout.deadkeys,k,this.
    prev)
793
794
        if(!h)
795
796
          k=this.customDrawKeyboard(k);
797
          if(k=="")
798
799
            k=" 
800
801
802
          d='<div class="branah-label-reference">'+branah.layout.parser.getKeyCode(
    this.defaultLayout.keys, 0, f.i) + '</div><div class="branah-label-natural" style="
    font-size:'+this.fontSize+'px;
          "> 
803
          '+k+"</div>"
804
805
        }
806
        else
807
          if(k=="")
202
209
            k=" 
810
811
812
          d='<div class="branah-label-reference">'+branah.layout.parser.getKeyCode(
813
    this.defaultLayout.keys, 0, f.i) + '</div><div class="branah-label-shift" style="fo
    nt-size:'+this.fontSize+'px;
          "> 
814
          '+k+"</div>"
815
816
        }
817
        document.getElementById("branah-"+f.i).innerHTML=d
818
819
      $("#branah-left-ctrl").removeClass();
      $("#branah-right-ctrl").removeClass();
820
821
      if(c)
822
823
        $("#branah-left-ctrl").addClass("branah-recessed"+(this.ctrl?"":"-hover"));
824
        $("#branah-right-ctrl").addClass("branah-recessed"+(this.ctrl?"":"-hover"))
825
826
      $("#branah-left-alt").removeClass();
827
      $("#branah-right-alt").removeClass();
828
      if(a)
829
      {
830
        $("#branah-left-alt").addClass("branah-recessed"+(this.alt?"":"-hover"));
831
        $("#branah-right-alt").addClass("branah-recessed"+(this.alt?"":"-hover"))
832
833
      $("#branah-left-shift").removeClass();
834
      $("#branah-right-shift").removeClass();
835
      if(h)
836
837
        $("#branah-left-shift").addClass("branah-recessed"+(this.shift?"":"-hover")
    );
838
        $("#branah-right-shift").addClass("branah-recessed"+(this.shift?"":"-hover"
839
      $("#branah-caps-lock").removeClass();
840
841
      if(b)
842
      {
843
        $("#branah-caps-lock").addClass("branah-recessed"+(this.caps?"":"-hover"))
844
```

```
845
846 }
847 ;
848 branah.keyboard.prototype.wireEvents=function()
850
      var a=this;
851
      $("#branah-keyboard").delegate("button", "mousedown", function(b)
852
853
        var c=this.id;
854
        a.interval=setInterval(function()
855
856
          a.counter++;
857
          if(a.counter>5)
858
859
            switch(c)
860
861
              case"branah-backspace":a.onBackspace();
862
863
              default:if(c.search("branah-k([0-9])|([1-3][0-9])|(4[0-7])")!=-1)
864
865
                a.onKey(c.substr(7));
866
                a.shift=false;
867
                a.alt=false;
868
                a.ctrl=false;
869
                a.drawKeyboard()
870
              }
871
              break
872
            }
873
874
          }
875
876
877
        ,50)
878
      }
879
      );
880
      $("#branah-keyboard").delegate("button", "mouseup", function(b)
881
882
        a.stopRepeat()
883
      }
884
      );
885
      $("#branah-keyboard").delegate("button", "mouseout", function(b)
886
      {
887
        a.stopRepeat()
888
      }
889
      );
890
      $("#branah-keyboard").delegate("button", "click", function(b)
891
892
        var c=this.id;
893
        switch(c)
894
895
          case"branah-left-shift":case"branah-right-shift":a.onShift();
896
897
          case"branah-left-alt":case"branah-right-alt":a.onCtrl();
898
          a.onAlt();
899
          break;
900
          case"branah-left-ctrl":case"branah-right-ctrl":a.onAlt();
901
          a.onCtrl();
902
          break;
903
          case"branah-escape":a.onEsc();
904
          break;
905
          case"branah-caps-lock":a.onCapsLock();
906
907
          case"branah-backspace":a.onBackspace();
908
          break;
909
          case"branah-enter":a.onEnter();
910
          break;
```

```
911
          case"branah-space":a.onSpace();
912
          break;
913
          default:if(c.search("branah-k([0-9])|([1-3][0-9])|(4[0-7])")!=-1)
914
915
            a.onKey(c.substr(7));
916
            a.shift=false;
917
            a.alt=false;
918
            a.ctrl=false;
919
            a.drawKeyboard()
920
          break
921
922
        }
923
924
      }
925
      );
926
      $("#branah-left-shift, #branah-right-shift").bind("mouseover",function(b)
927
928
        a.shiftOn=true;
929
        a.drawKeyboard()
930
931
      );
932
      $("#branah-left-shift, #branah-right-shift").bind("mouseout",function(b)
933
934
        a.shiftOn=false;
935
        a.drawKeyboard()
936
      }
937
      );
938
      $("#branah-left-ctrl, #branah-right-ctrl").bind("mouseover",function(b)
939
940
        a.altCtrlOn=true;
941
        a.drawKeyboard()
942
      }
943
      );
      $("#branah-left-ctrl, #branah-right-ctrl").bind("mouseout",function(b)
944
945
946
        a.altCtrlOn=false;
947
        a.drawKeyboard()
948
      }
949
      );
950
      $("#branah-left-alt, #branah-right-alt").bind("mouseover",function(b)
951
952
        a.altCtrlOn=true;
953
        a.drawKeyboard()
954
      }
955
      );
      $("#branah-left-alt, #branah-right-alt").bind("mouseout",function(b)
956
957
958
        a.altCtrlOn=false;
959
        a.drawKeyboard()
960
      }
961
      );
962
      $("#branah-caps-lock").bind("mouseover", function(b)
963
      {
964
        a.capsOn=true;
965
        a.drawKeyboard()
966
967
      );
      $("#branah-caps-lock").bind("mouseout",function(b)
968
969
970
        a.capsOn=false;
971
        a.drawKeyboard()
972
973
      );
974
      a.textbox.bind("keydown", function(b)
975
976
        var d=branah.util.keyCode(b);
```

```
977
         if((d==65||d==67||d==86||d==88||d==89||d==90)&&(a.ctrl&&!a.alt&&!a.shift))
 978
 979
           return
 980
 981
         if (a.currentLayout==a.defaultLayout&&d!=27)
 982
 983
           return
 984
         }
 985
         switch (d)
 986
         {
 987
           case 17:a.ctrl=false;
 988
           a.onCtrl();
 989
           break;
 990
           case 18:a.alt=false;
 991
           a.onAlt();
 992
           break;
 993
           case 16:a.shift=false;
 994
           a.onShift();
 995
           break;
 996
           case 27:a.onEsc();
 997
           break;
 998
           case 8:a.onBackspace();
 999
           b.preventDefault();
1000
           break;
1001
           case 32:a.onSpace();
1002
           b.preventDefault();
1003
           break;
1004
           case 10:a.onEnter();
1005
           b.preventDefault();
1006
           break;
1007
           default:var c=branah.layout.parser.getKeyId(branah.util.keyCode(b));
1008
           if(c!=-1)
1009
           {
             a.onKey("k"+c);
1010
1011
             a.drawKeyboard();
1012
             b.preventDefault();
1013
             a.cancelkeypress=true
1014
1015
           break
1016
         }
1017
1018
       }
1019
       );
1020
       if($.browser.opera)
1021
       {
         a.textbox.bind("keypress", function(b)
1022
1023
         {
1024
           if(a.cancelkeypress)
1025
1026
             b.preventDefault();
1027
             a.cancelkeypress=false
1028
1029
1030
         }
1031
1032
1033
       a.textbox.bind("keyup", function(b)
1034
       {
1035
         switch (branah.util.keyCode(b))
1036
1037
           case 17:a.ctrl=true;
1038
           a.onCtrl();
1039
           break;
1040
           case 18:a.alt=true;
1041
           a.onAlt();
1042
           break;
```

```
1043
           case 16:a.shift=true;
1044
           a.onShift();
1045
           break;
1046
           default:
1047
         }
1048
1049
       }
1050
       )
1051 }
1052 ;
1053
     keyboard.customOnKey=function(b)
1054 {
1055
       branah.util.insertAtCaret(this.nativeTextbox,b);
1056
       var a=branah.util.deleteAtCaret(this.nativeTextbox, 2, 0);
1057
       branah.util.insertAtCaret(this.nativeTextbox, korean.composeHangul(a));
1058
       return true
1059 }
1060;
1061 keyboard.customOnBackspace=function(a)
1062 {
1063
       a=korean.decomposeHangul(a);
1064
       if(a.length>1)
1065
1066
         branah.util.insertAtCaret(this.nativeTextbox, korean.composeHangul(a.slice(0
     , -1)))
1067
1068
1069 }
1070 ;
1071 branah.util.indexOf=function(a,d)
1072 {
1073
       var c=a.length;
1074
       for (var b=0;
1075
       b<c;
1076
       b++)
1077
       {
1078
         if(a[b]==d)
1079
         {
1080
           return b
1081
1082
1083
       }
1084
       return -1
1085 }
1086;
1087 var korean={initial:[12593,12594,12596,12599,12600,12601,12609,12610,12611,1261
     3,12614,12615,12616,12617,12618,12619,12620,12621,12622],finale:[0,12593,12594,
     12595, 12596, 12597, 12598, 12599, 12601, 12602, 12603, 12604, 12605, 12606, 12607, 12608, 1
     2609, 12610, 12612, 12613, 12614, 12615, 12616, 12618, 12619, 12620, 12621, 12622], dMedial
     :[0,0,0,0,0,0,0,0,0,0,800,801,820,0,0,1304,1305,1320,0,0,1820],dFinale:[0,0,0,119
     ,0,422,427,0,0,801,816,817,819,825,826,827,0,0,1719,0,1919],SBase:44032,LBase:4
     352, VBase: 12623, TBase: 4519, LCount: 19, VCount: 21, TCount: 28, NCount: 588, SCount: 1117
     2, composeHangul:function(k)
1088 {
1089
       var f=k.length;
1090
       if(f==0)
1091
       {
1092
         return""
1093
1094
       var e=k.charCodeAt(0);
1095
       var h=String.fromCharCode(e);
1096
       var a,g,m,c,l,b,j;
1097
       for (var d=1;
1098
       d < f;
1099
       ++d)
1100
```

```
1101
         a=k.charCodeAt(d);
1102
         g=branah.util.indexOf(this.initial,e);
1103
         if(q!=-1)
1104
1105
           m=a-this.VBase;
1106
            if (0<=m&&m<this.VCount)
1107
1108
              e=this.SBase+(q*this.VCount+m)*this.TCount;
1109
              h=h.slice(0,h.length-1)+String.fromCharCode(e);
1110
              continue
1111
1112
1113
1114
         j=e-this.SBase;
1115
         if (0 \le j \&\&j \le 11145\&\&(j \&this.TCount) == 0)
1116
1117
            l=branah.util.indexOf(this.finale,a);
1118
            if(1!=-1)
1119
1120
              e^{+=1};
1121
              h=h.slice(0,h.length-1)+String.fromCharCode(e);
1122
              continue
1123
1124
           m=(j%this.NCount)/this.TCount;
1125
            c=branah.util.indexOf(this.dMedial,(m*100)+(a-this.VBase));
1126
            if(c>0)
1127
              e+=(c-m)*this.TCount;
1128
1129
              h=h.slice(0,h.length-1)+String.fromCharCode(e);
1130
              continue
1131
1132
1133
1134
         if (0 \le j \& \& j \le 11172 \& \& (j \& this. TCount) != 0)
1135
1136
            l=j%this.TCount;
1137
           m=a-this.VBase;
            if(0<=m&&m<this.VCount)</pre>
1138
1139
1140
              g=branah.util.indexOf(this.initial,this.finale[1]);
1141
              if (0<=g&&g<this.LCount)</pre>
1142
1143
                h=h.slice(0,h.length-1)+String.fromCharCode(e-1);
1144
                e=this.SBase+(g*this.VCount+m)*this.TCount;
1145
                h=h+String.fromCharCode(e);
1146
                continue
1147
1148
              if (1<this.dFinale.length&&this.dFinale[1]!=0)
1149
1150
                h=h.slice(0,h.length-1)+String.fromCharCode(e-1+Math.floor(this.dFina
     le[1]/100));
1151
                e=this.SBase+(branah.util.indexOf(this.initial,this.finale(this.dFin
     ale[1]%100)])*this.VCount+m)*this.TCount;
1152
                h=h+String.fromCharCode(e);
1153
                continue
1154
1155
1156
1157
           b=branah.util.indexOf(this.dFinale, (1*100)+branah.util.indexOf(this.final
     e,a));
1158
            if(b>0)
1159
1160
              e=e+b-1;
1161
              h=h.slice(0,h.length-1)+String.fromCharCode(e);
1162
              continue
1163
```

```
1164
1165
         }
1166
         e=a;
1167
        h=h+String.fromCharCode(a)
1168
1169
       return h
1170 }
1171 , decomposeHangul: function(g)
1172 {
1173
       var d=g.length;
       var e="";
1174
1175
       var a,f,c,j,h;
1176
       for (var b=0;
1177
       b<d;
1178
       b++)
1179
       {
1180
         var a=g.charCodeAt(b);
1181
         f=a-this.SBase;
1182
         if (f<0||f>=this.SCount)
1183
1184
           e=e+String.fromCharCode(a);
1185
           continue
1186
         }
1187
         c=this.initial[Math.floor(f/this.NCount)];
1188
         j=this.VBase+(f%this.NCount)/this.TCount;
1189
         h=this.finale[f%this.TCount];
1190
         e=e+String.fromCharCode(c,j);
1191
         if(h!=0)
1192
         {
1193
           e=e+String.fromCharCode(h)
1194
1195
1196
       }
1197
       return e
1198 }
1199
1200 }
1201 ;
1202
1203
```