```
package TaskList::category ;

use strict ;

use TaskList::task ;
use TaskList::contact ;
use TaskList::Characters ;

sub name {
  my $tag = shift ;
  return $tag->{name} ;
}

sub kids {
  my $tag = shift ;
  return @{$tag->{Kids}} ;
}

sub parse {
  my $tag = shift ;

  $tag->{tasks}->{norm} = [] ;
  $tag->{tasks}->{hi}   = [] ;
  $tag->{tasks}->{lo}   = [] ;
  $tag->{contacts}      = [] ;
  my @valid_content = qw(task contact Characters) ;
  my $warnings = 0 ;

  my $name = ref $tag ;
  $name    =~ s/^TaskList::// ;

  foreach my $kid ($tag->kids()) {
    my $kidname = ref $kid ;
    $kidname =~ s/^TaskList::// ;

    # first, check that this tag is valid in this context. Then...
    unless (grep $kidname eq $_, @valid_content) {
      warn "WARNING: Invalid tag $kidname into $name\n" ;
      ++$warnings ;
    }

    $warnings += $kid->parse() ;
    if ($kidname eq 'task') {
      # do this after calling parse(), or you won't get anything here.
      # We save this kid in the attribute tasks of the object. tasks is
      # a reference to an hash of arrays; each key is a priority:
      #
      # $tag -> tasks --+--> norm = [normtask, normtask, ...]
      #                 +--> hi   = [hi-prio-task, hi-prio-task, ...]
      #                 +--> lo   = [lo-prio-task, lo-prio-task, ...]
      my $prio = $kid->prio() ;
      push @{$tag->{tasks}->{$prio}},$kid ;
    } elsif ($kidname eq 'contact') {
      push @{$tag->{contacts}},$kid ;
    }
  }

  return $warnings ;
}


sub code {
  my $tag = shift ;
  my $code ;

  my %tasks = %{$tag->{tasks}} ;
  my @contacts = @{$tag->{contacts}} ;

  my @tasks = (@{$tasks{hi}},     # in order, hi priority tasks...
               @{$tasks{norm}},   # ...then normal priority...
               @contacts,         # ...then contact jobs...
               @{$tasks{lo}}) ;   # ...and lo priority at last.

  foreach my $task (@tasks) {
    $code .= $task->code() ;
  }

   my $header = '<h2>'.$tag->name().'</h2>' ;
```

```
  my $footer = '<hr>' ;

  return join "\n",($header,$code,$footer) ;
}

1;
```