

```

class Entity {
    int      _id;
    Attribute *_attribute;
};

class Model : public Entity {
    Model    *_next;           // next model
    Region   *_region;        // list of regions
};

class Region : public Entity {
    Region   *_next;           // link field of the region list of a model
    Model    *_model;          // parent model
    Shell    *_shell;          // peripheral shell
};

class Shell : public Entity {
    Shell    *_next;           // next void shell
    Region   *_region;          // parent region
    Pface    *_pface;          // partial face
};

class Pface : public Entity { // partial face (p-face) class
    Pface    *_next;           // next p-face
    Shell    *_shell;          // parent shell
    Entity    *_child;          // child entity: a face, an edge, or a vertex
    Orient    _orient;          // orientation flag w.r.t. the face normal
    Pface    *_mate;           // mate p-face
};

class Face : public Entity {
    Pface    *_pface;          // one of two incident p-faces
    Loop     *_loop;           // peripheral loop
    Surface   *_geometry;       // surface
};

```