OpticalComponent< T, U >

std::unique_ptr< Optical
  Surface< T, U > > surface

OpticalComponentType type

+ OpticalComponent(std
  ::unique_ptr< OpticalSurface
  < T, U > > surface, OpticalComponent
  Type type)

+ virtual ~OpticalComponent
  ()=default

+ const vec3< T > & getPosition
  () const

+ const vec3< T > & getNormal
  () const

+ OpticalSurface< T,
  U > * getSurfacePtr()

+ OpticalComponentType
  getType() const

+ virtual void handleLight
  (Ray< T, U > &ray, const
  vec3< T > &intersectionPoint)=0

Mirror< T, U >

+ Mirror(std::unique
  _ptr< OpticalSurface
  < T, U > > surface)

+ virtual ~Mirror()=default

+ virtual void handleLight
  (Ray< T, U > &ray, const
  vec3< T > &intersectionPoint)
  override=0

void reflect(Ray< T,
  U > &incidentRay, const
  vec3< T > &normal, const
  vec3< T > &intersectionPoint)

ConcaveMirror< T, U >

+ ConcaveMirror(std
  ::unique_ptr< OpticalSurface
  < T, U > > surface)

+ void handleLight(Ray
  < T, U > &ray, const
  vec3< T > &intersectionPoint)
  override

ConvexMirror< T, U >

+ ConvexMirror(std::
  unique_ptr< OpticalSurface
  < T, U > > surface)

+ void handleLight(Ray
  < T, U > &ray, const
  vec3< T > &intersectionPoint)
  override

PlanarMirror< T, U >

+ PlanarMirror(std::
  unique_ptr< OpticalSurface
  < T, U > > surface)

+ void handleLight(Ray
  < T, U > &ray, const
  vec3< T > &intersectionPoint)
  override