

```

namespace paql
{
    namespace container
    {
        class ElementContainer :
        public std::list< boost::reference_wrapper<paql::element::Element> >,
        public virtual boost::fusion::map
        <
            boost::fusion::pair
            <
                MetaKey<boost::fusion::vector<T00, ..., T0n>, 0>,
                std::map
                <
                    boost::fusion::vector<T00, ..., T0n>,
                    boost::reference_wrapper<paql::element::Element>,
                    paql::FusionVectorComparator
                <
                    boost::fusion::vector<T00, ..., T0n>
                >
                >
            >,
            .
            .
            .
        >
        // One boost::fusion::map entry per key
    >
    {
        public:
        template<int keyIndex> paql::element::Element& get
        (T00 a0, ..., T0n an)
        {
            boost::fusion::vector<int>key(a0, ..., an);
            return
                (boost::unwrap_reference<paql::element::Student>::type&)
                (
                    (
                        (
                            boost::fusion::at_key
                            <
                                MetaKey<boost::fusion::vector<int>, 0>
                            >(*this)
                        ).find(key)
                    )->second
                );
        }
        .
        .
        .
        // one get method per key
        bool insert(paql::element::Element& elem)
        {
            boost::reference_wrapper<paql::element::Element> reference =
                boost::ref<paql::element::Element>(elem);
            {
                boost::fusion::vector<int> key(elem.var00, ..., elem.var0n)
                if
                (
                    (
                        (
                            boost::fusion::at_key
                            <
                                MetaKey
                                <
                                    boost::fusion::vector<T00, ..., T0n>, 0>
                                >(*this)
                            ).count(key)
                        ) return false;
                    (
                        boost::fusion::at_key
                        <
                            MetaKey<boost::fusion::vector<T00, ..., T0n>, 0>
                        >(*this)
                    ).insert
                    (
                        std::map
                        <
                            boost::fusion::vector<T00, ..., T0n>,
                            boost::reference_wrapper<paql::element::Element>,

```

```

        FusionVectorComparator
        <
            boost::fusion::vector<T00, ..., T0n>
        >
        >::value_type(key, elementToInsert)
    );
}
.
.
.
// one insertion scope per key
this->push_back(boost::ref(element));
return true;
}
void remove(paql::element::Student& element)
{
    {
        boost::fusion::vector<int> key(element.code);
        (
            boost::fusion::at_key
            <
                MetaKey<boost::fusion::vector<int>, 0>
            >(*this)
        ).erase(key);
    }
    .
    .
    .
    // one remove scope per key
    this->remove_if
    (
        ContentComparator<paql::element::Student>
        (
            boost::ref(element)
        )
    );
}
};
}
}
}

```